PUBLIC UTILITIES FORTNIGHTLY 25th ANNIVERSARY 1929-1954

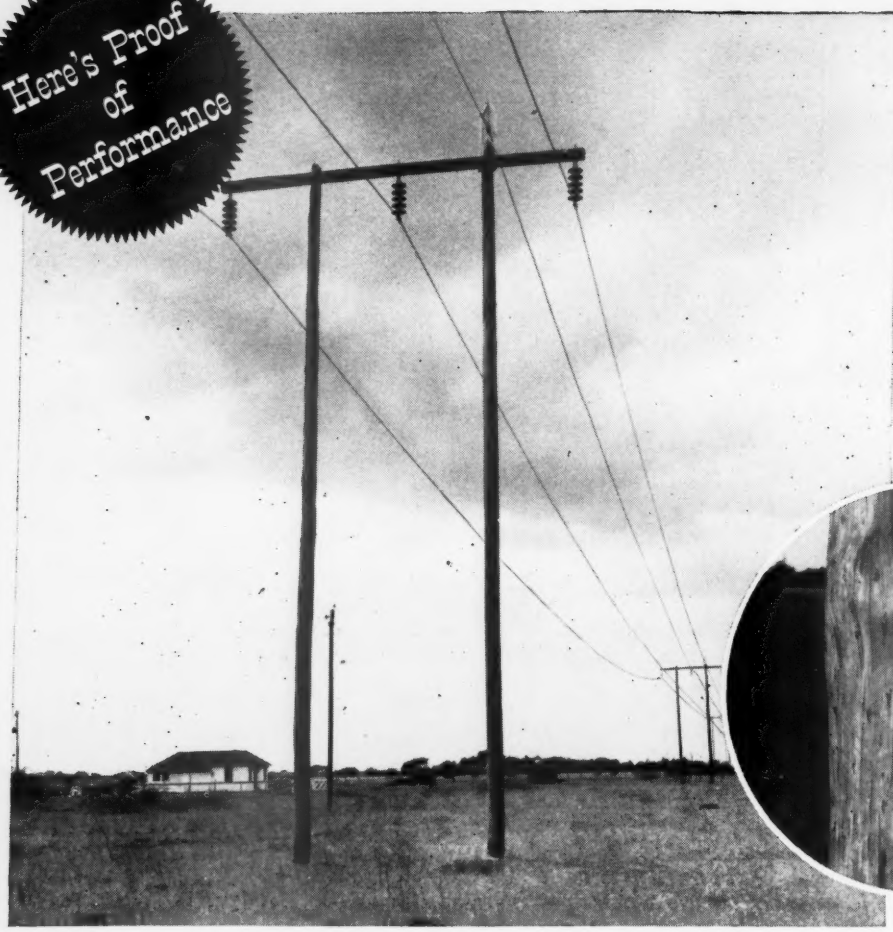
Public Utilities

FORTNIGHTLY

Volume 54 No. 2 July 22, 1954

PUBLIC UTILITIES REPORTS, INC., PUBLISHERS

Here's Proof of Performance



SOME OF THE 28-y... pressure-creosoted po... Wallis-Sealy line of ... Lighting & Power ... Houston, Tex. The po... three phase and one s...

A CLOSE-UP of one of ... showing its excellent ... They have a future li... ancy of five to ten ye...

247 pressure-creosoted poles installed in 1926

...233 STILL IN GOOD CONDITION TODA

● A combination of warm moist climate and the prevalence of termites makes the use of pressure-creosoted poles a necessity for Houston Lighting & Power Company. It means the difference between five years of life for an untreated pole to 30 to 35 years for a treated one.

A good example of sound pole line planning is found in the 11.8 miles of 66 KV outer loop between the Texas communities of Wallis and Sealy—all pressure-creosoted poles. Here 247 poles were installed in 1926 (actually 260—but 13 were since replaced to obtain greater height). Today, after 28 years of exposure to weather and wood's natural enemies, 233 poles—or over 94% of the original line—remain in good condition, with a future life of 5 to 10 years.

Houston Lighting & Power Company first used pressure-creosoted poles in 1921, and conversion has been complete now for more than 20 years. Southern yellow pine and fir poles are treated with Creosote ... pounds retention.

You can count on uniformly ... results when your poles are t... with USS Creosote—the prod... United States Steel's tar dis... operations. For more inform... on USS Creosote and the lon... life it assures, contact our n... Coal Chemical sales office or ... directly to United States Steel ... poration, 525 William Penn ... Pittsburgh 30, Pa.

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Public Utilities FORTNIGHTLY

VOLUME 54 JULY 22, 1954 NUMBER 2

ARTICLES

FEATURE SECTIONS

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- **Increases safety by simplifying operation**
- **Reduces maintenance**
- **Increases availability**

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With its revolutionary approach to the entire process of preparing and burning fuel, the B&W Cyclone Furnace offers such a simplification of initial design and increased facility in everyday operation, that the overall cost of producing power is greatly benefited. Let us discuss with you the various cost-saving advantages of the Cyclone Furnace for your operation. The Babcock & Wilcox Company, Boiler Division, 161 East 42nd Street, New York 17, N. Y.


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Pages with the Editors

WE hear a good bit these days about the need of a "partnership" approach in electric power problems for the development of the national resources in various regions. In fact, the "partnership" approach seems to be the accepted label under which the Eisenhower administration would like to have its power policies examined by the people of this country.

THE most interesting thing about this "partnership" pattern is the variety of "partners" who are eligible under the new rules to join in the various local programs. Out in the Pacific Northwest, for example, Puget Sound Power & Light Company has joined with Seattle City Light and Tacoma City Light and two county public utility districts (Snohomish and Chelan). These agencies—two municipalities, two districts, and one private utility—have pledged themselves to cooperate in the development of the power resources in that area. They have agreed that it is a joint responsibility to meet the growing need of power for all purposes.

OBVIOUSLY, any such arrangement entails co-operative planning and co-operative scheduling of necessary construction so that the most urgent need will be the soonest fulfilled. This is a far cry from the cat-and-dog atmosphere which prevailed in this region and other regions, during the past two decades, between public and private power agencies.

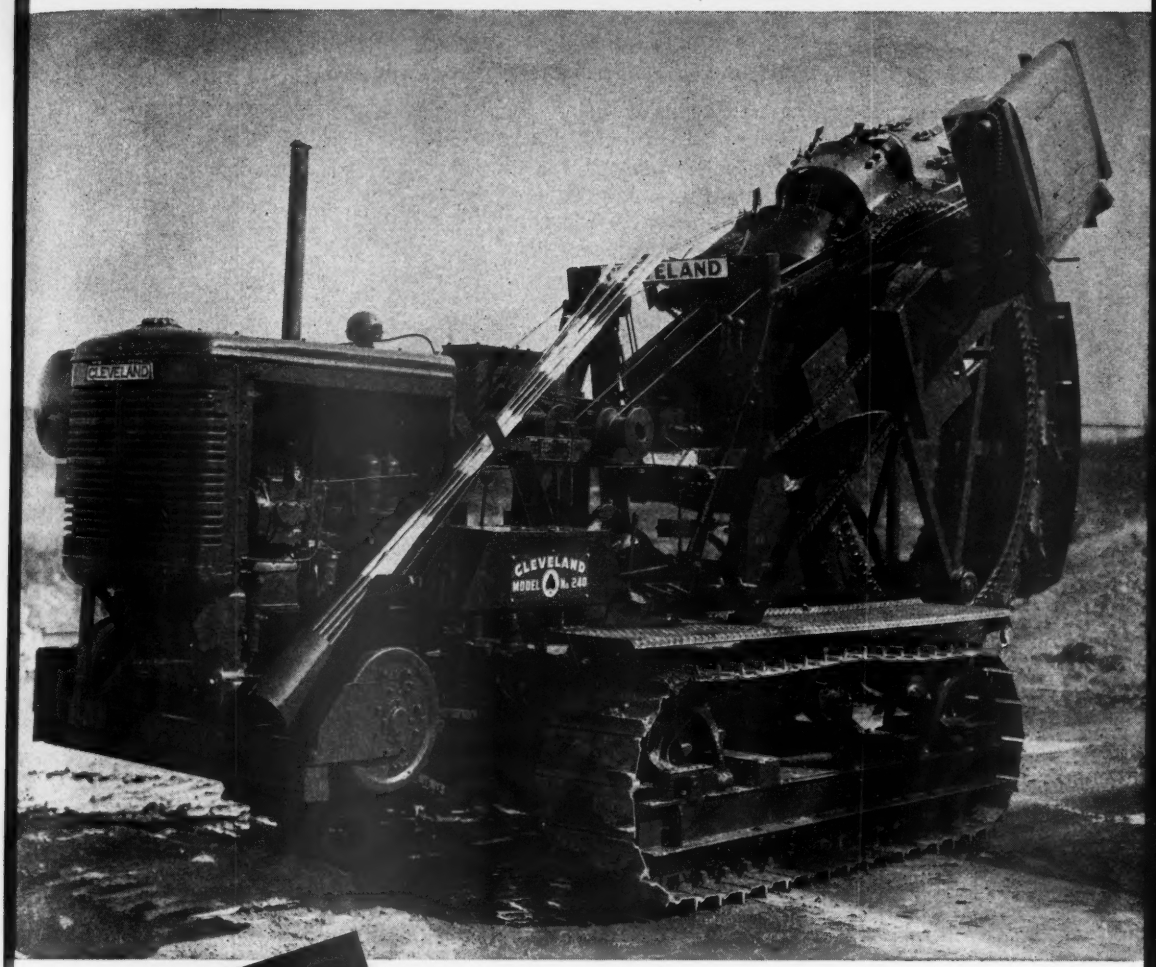
A. BRYAN MARVIN

LAWRENCE E. KARRER, executive vice president of Puget Sound Power & Light Company, put it very frankly when he said that it was "the first time since the 1890's that we have been on speaking terms with the city of Tacoma." He added that the company had been scrapping with the city of Seattle on and off for a half decade. Heading Seattle City Light is Dr. Paul J. Raver, until recently Bonneville Power Administrator.

THIS may be only the first of a series of co-operative arrangements which may blossom under the more friendly and impartial attitude towards all power agencies, both public and private, which has characterized the advent of the "partnership" policy. And if it bears enough of such fruit, it will be one of the most constructive accomplishments of the Eisenhower administration.

Too long has the American public been bemused and confused with claims and counterclaims from rival camps in a war which could have been settled on an amicable basis in the first place. Only the professional politicians, who have been riding the issue as a political horse in election after election, will regret the passing of this era of bickering and recrimination.

ONE reason why all segments of the electric industry must maintain arrangements for mobile and flexible accommodations to changing conditions is the variation of load from time to time. When an electric system is planned, geography must play a big part. It is important to locate a source of generation in a spot that will suit the load it is supposed to serve.



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In this issue the leading article tells about the steps the electric utilities take to anticipate and provide for changes in American living habits. It is a thought-provoking account of the relative growth of various appliances in municipal areas. The author is A. BRYAN MARVIN, who works with the press relations and public information division of Consolidated Edison Company of New York. Educated at St. Marks and Yale University, MR. MARVIN found his way into the utility industry after two years' service as a newspaper reporter with the *Stamford* (Connecticut) *Advocate.*

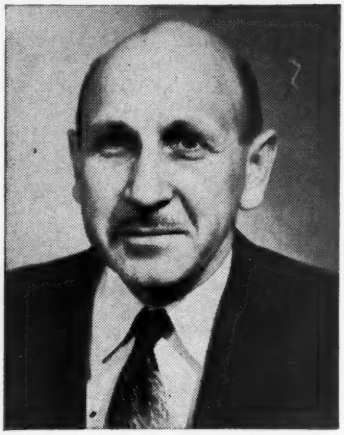
* * * *

ALSO in this issue we present the second and concluding instalment of the 2-part series of articles on the state of public utilities in Latin America by HERBERT BRATTER, author of business articles and financial writer who makes his home in Washington, D. C. MR. BRATTER recently visited Costa Rica, where he inquired into the electric utility situation, and other Central American countries. Everywhere he reports encountering power shortages. In San Jose the arches installed along the Avenida Central on the occasion of the inauguration of President Figueres could not be illuminated until long after dark because of the shortage of electricity.

MR. BRATTER tells us that to make up for the added load of residential customers which the electric company is required to service, the National Electricity Service, a government body, does not permit stores to put on their electric signs until 6:30 P.M. Similar reports are brought back by travelers to other parts of Latin America, among them the Milton Eisenhower mission to South America, whose comments on the power situation are quoted in MR. BRATTER'S article.

* * * *

THE author of the article on "Planned Development of Public Airports" pursuant to the Federal Airport Act, which begins on page 68, is J. C. D. BLAINE, associate professor in business administration, of the North Carolina University School of Business Administration. MR. BLAINE was educated at



J. C. D. BLAINE

Queens University, Kingston, Ontario (B. Comm., '34), the University of North Carolina (SM, '39 and PhD, '41). He has also taught in Saskatchewan high schools and at Albert College, Belleville, Ontario. He has written a number of articles on the economics of commercial air transportation.

* * * *

AMONG the important decisions preprinted from *Public Utilities Reports* in the back of this number, may be found the following:

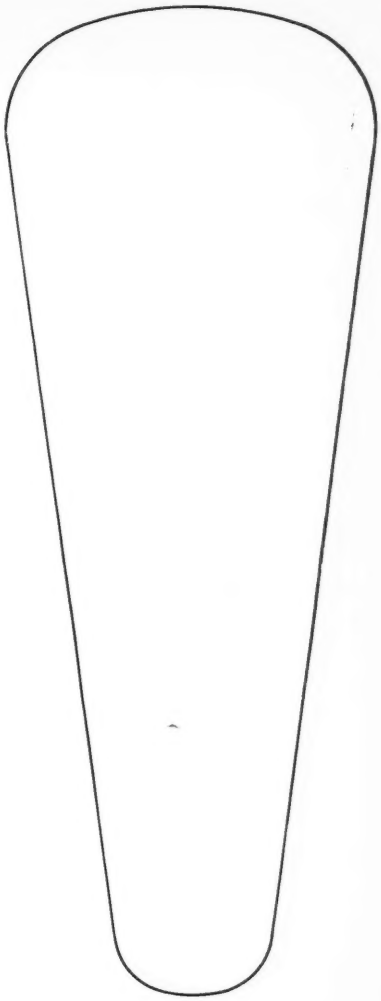
THE United States Supreme Court affirms a lower court judgment reversing a Federal Power Commission decision holding that a petroleum company producing and gathering gas and selling it to pipeline companies was not a natural gas company subject to regulation under the Natural Gas Act. (See page 129.)

THE Florida supreme court holds that the commission has no power to deny a rate increase, which it has found to be just, by inflicting a penalty because of poor or inadequate service. (See page 145.)

THE next number of this magazine will be out August 5th.

The Editors

new



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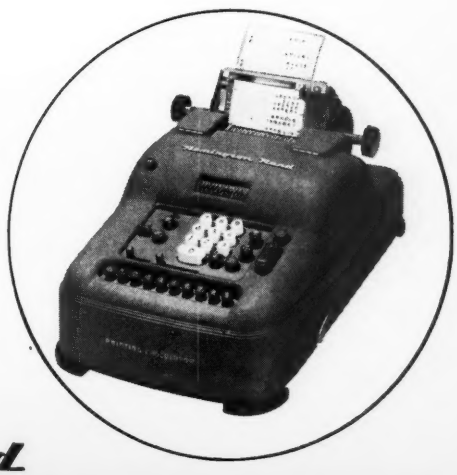

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Coming IN THE NEXT ISSUE

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IMPACT OF INFLATION ON PUBLIC UTILITIES

What should responsible utility executives do about the impact of inflation on the earnings of their companies? Should they seek a positive corrective measure, even though it means drastic changes in prevailing regulatory practice? Or should they go along with the trend in view of the practical difficulties and possible boomerangs which might be incurred in trying to change the ground rules? Or is it possible to do anything about it, even assuming that inflation is here to stay and that existing utility investors, at least, will suffer through deterioration in the integrity of their investment? All three viewpoints, in a general way, were most thoughtfully and forcefully presented at an executive conference of the American Gas Association at Lake Placid, New York, during mid-May. Some of these views and arguments from three executives in a panel discussion created such widespread interest that there have been requests for a restatement of the text in published form. Hence this 3-part symposium, which treats of the impact of inflation on utilities, by Frank L. Griffith, vice president and comptroller, The Peoples Gas Light and Coke Company; W. J. Herrman, vice president, Southern California Gas Company; and Robert E. Ginna, executive vice president, Rochester (New York) Gas & Electric Corporation.

TECHNIQUES FOR OBTAINING DEPRECIATION REPLACEMENT COSTS

C. J. Boake, a registered consultant engineer in Illinois, has written this article on the need for and demonstration of expeditious methods for obtaining depreciated replacement costs of utility property accounts. This is a very useful and practical article, covering one of the most important matters before the regulatory bodies and utility officers and other utility rate case parties at the present time. There is an extensive discussion of the determination of reproduction cost in those jurisdictions where it is a required element of proof for a rate base.

★

Also . . . ***Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.***

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Remarkable Remarks

"There never was in the world two opinions alike."
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ROBERT E. WOOD
Former chairman, Sears Roebuck & Co.

"The greatest protection to our system is to create more capitalists."

W. A. PATTERSON
President, United Air Lines.

"[Business is] the ideas of men to produce things and to create services."

CLARENCE B. RANDALL
Chairman of the board, Inland Steel Company.

"The first job of the American businessman is not his duty to his company, but his duty to his country."

HERBERT J. MILLER
Executive director, Tax Foundation.

"We fail to recognize that deficit spending in depressions must be made up in good times by paying off the debt."

HERBERT HOOVER
Former President of the United States.

"I might observe generally that creating public debt through deficits is creating a dead horse. Private debt creates live horses."

MERLE THORPE
Director of business development, Cities Service Company.

"The natural resources of the nation, like oil, do not simply exist. For all practical purposes, they are created, by being found, and brought to market."

CLIFFORD F. HOOD
President, United States Steel Corporation.

"We need more frank and basic discussion in defense of private capitalism—not in terms of bathtubs and washing machines, but in terms of sound fundamentals."

SHERMAN ADAMS
Assistant to President Eisenhower.

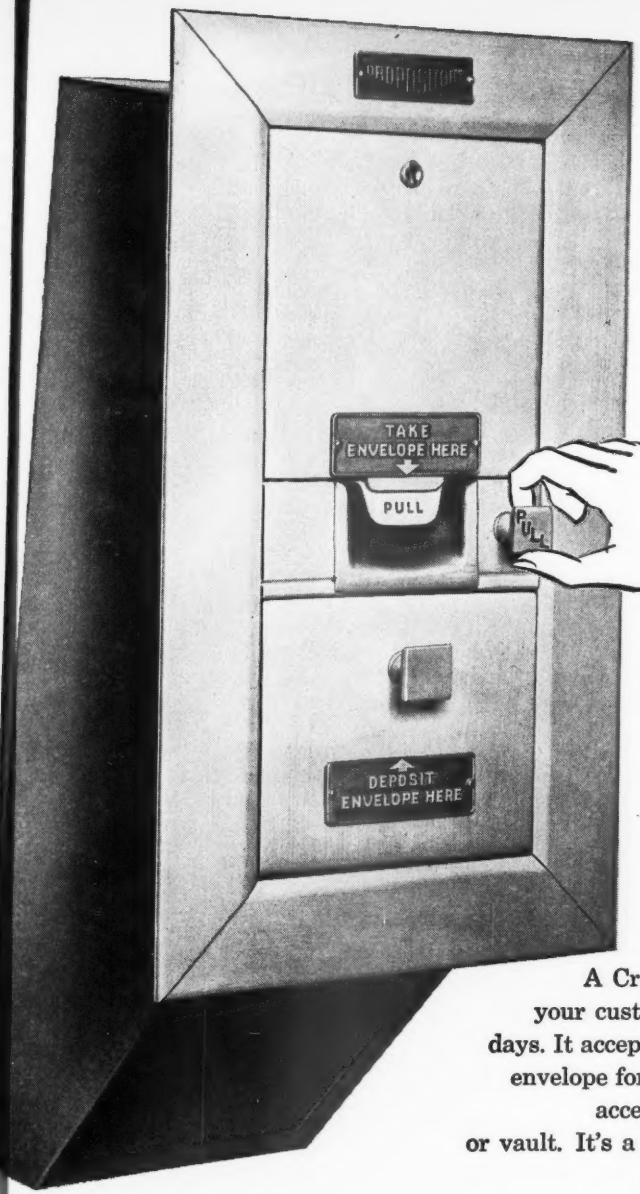
"Liberty in this country would be soon extinguished, if the time ever came when a man in a town meeting or in Congress did not have the right to stand up on his own feet and declare, 'I object.'"

CARL F. WENTE
Recently retired president, Bank of America.

"We do not always have to make a new high to be able to say that business is good. We will all be better off if we go to work and make 1954 a good year rather than sit around and talk about what kind of year it will be."

SIDNEY A. SWENSRUD
Chairman of the board, Gulf Oil Company.

"Perhaps there was a day when management could tell the rest of the country—take it and like it—but if there ever was that day it is gone. Today we need from the business schools men who are willing to go beyond the offices of management out into the factories and beyond the factories' walls out into their communities, to play a rôle of leadership in community affairs that is co-operative and honest and who will sell the merits of private enterprise and American business both by what they do and what they say."



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REMARKABLE REMARKS—(*Continued*)

WILLIAM RANDOLPH HEARST
Late publisher.

"You cannot have equal privileges and unequal obligations, and maintain a government based on equal rights."

SUMNER T. PIKE
Chairman, Maine Public Utilities Commission.

"This baby [Passamaquoddy] ought to be either shot or brought up. I don't like to hear it squalling all the time."

LESTER B. PEARSON
Foreign Secretary of Canada.

"We must certainly make sacrifices for security, but governments should also be aware of the very real danger of whittling away our fundamental freedoms of movement, as well as of thought and of speech."

WILLIS GALE
Chairman of the board, Commonwealth Edison Company.

"If the law permitted, we could build a large-scale atomic power plant now if we didn't care what it cost. We know that such a plant is feasible on an engineering and operating basis. We also know that it is not economically feasible today."

BENSON FORD
Vice president, Ford Motor Company.

"If we are to have dynamic growth, business must have profit incentive. It must have competition. Business management must generate within its own ranks and spread far and wide a vigorous, reasoned optimism in the future of our American economy."

W. J. MCGILL
General manager, industrial and public relations, Standard Oil Company (Indiana).

"The main thing [in employee relations] is to really want to let your people know what you are doing, and what you are thinking, and be interested in what they are thinking. Then tell them a little too much rather than much too little and remember to listen."

CARROL M. SHANKS
President, Prudential Insurance Company of America.

"The importance of confidence becomes crystal clear when you realize that possibly half of everything people buy consists of things they can do without if pressed, or can postpone for a considerable time. This means that the difference between a boom and a recession hangs by the slender thread of the consumer's willingness to buy freely instead of to hoard."

SHERMAN R. KNAPP
President, The Connecticut Light & Power Company.

"Electric power, for all practical purposes, is a packaged product. It is not enough merely to make it available. The package must be opened, the switch snapped, before it can be consumed and paid for. If, as an industry, we are to load up the capacity now being installed and planned, I think we shall have to demonstrate with *selling action* our belief in what it can do for our customers whether they are housewives, farmers, storekeepers, or manufacturers."

Excerpt from Time Magazine.

"For a good company, there is no mystery in good public relations. The secret is simply to tell all it can about itself. One of the first to realize this was American Telephone and Telegraph which staffs its public relations department with ex-newspapermen and experienced company hands. Five of AT&T's subsidiary Bell presidents once headed its public relations program. AT&T capitalizes on its own greatest asset. Instead of answering stockholders' complaints or other communications by letter, it calls them up."

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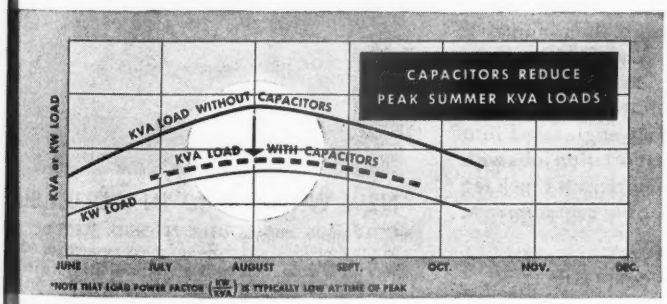
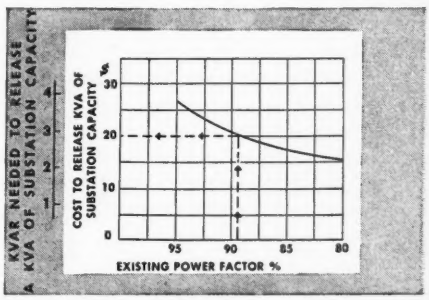


SUMMER PEAKS equaled or exceeded those of December in approximately 50 utilities last year, and these are low power factor peaks as shown above—a direct result of increased air conditioning loads.



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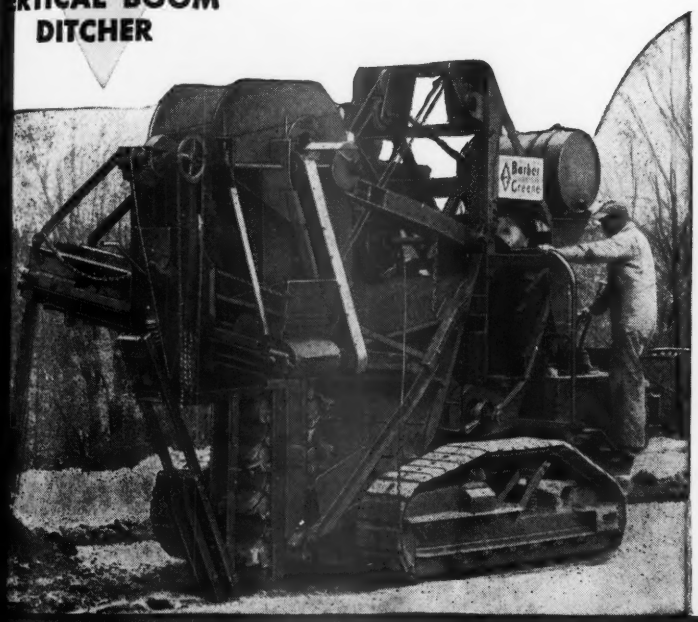

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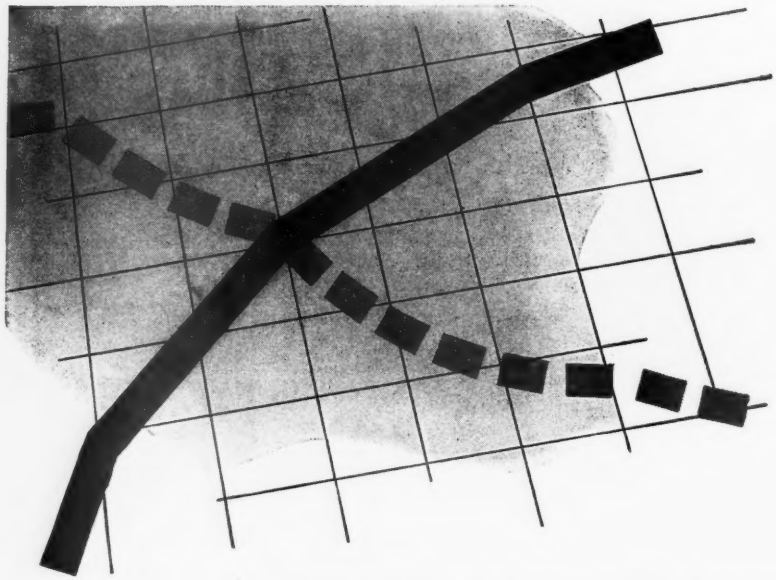
Barber-Greene BG

Aurora, Illinois, U. S. A.



A SOUND RATE STRUCTURE
is the key to adequate earnings

Basic economic analyses affecting pricing policy
Analysis of factors influencing rate design
Studies involving rate base, cost of money, rate of return
Preparation and presentation of expert testimony in rate proceedings
Cost of service analyses
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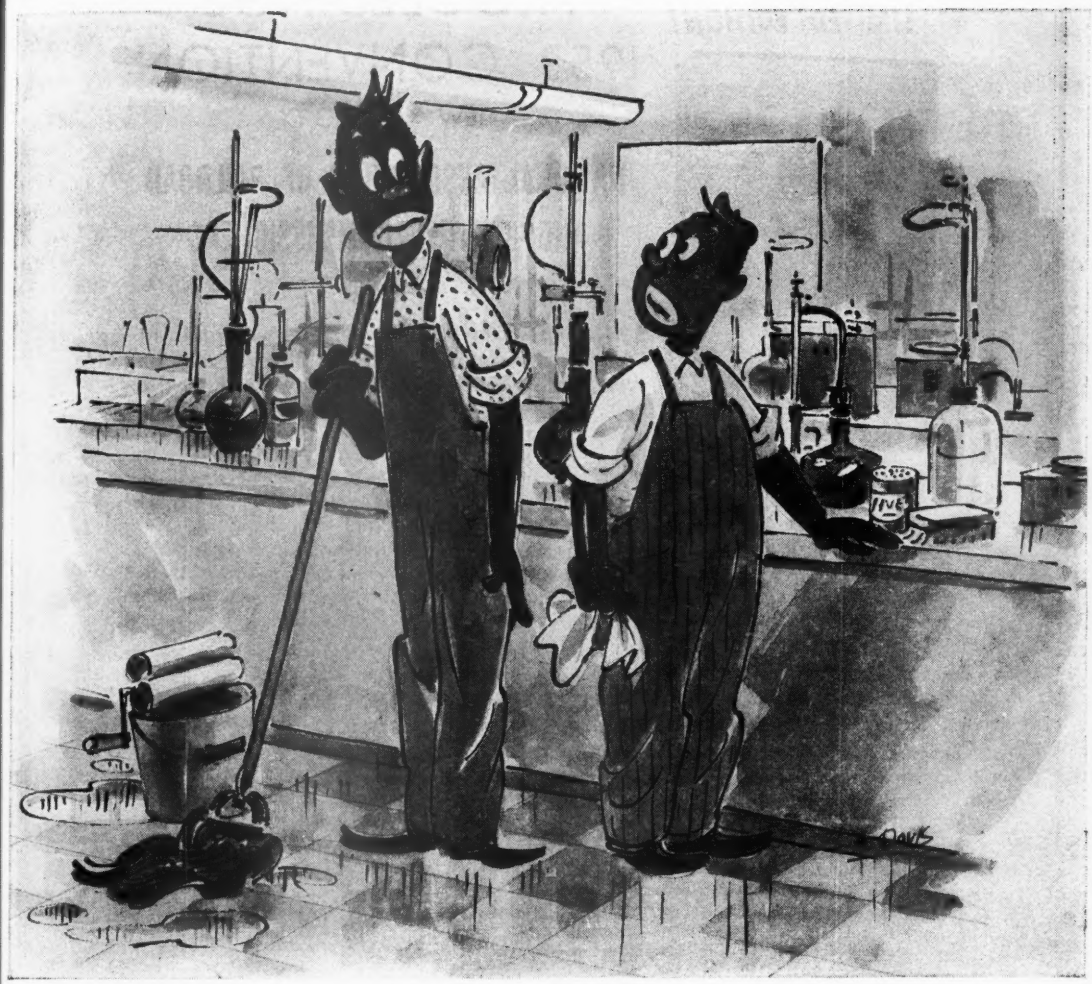

"DOCTAH Brown, Ah is you associate DOCTAH Jones, an' ah says be careful with all these bottles o' HYDROGEN this an' that."

A TRUE STORY is cartooned here. The research Ph D's at Chemstrand overhear the porters addressing each other with mock dignity as "DOCTAH".

Of course we all suspect that the joke is on us, rather than on the porters. We intend to be leaders instead of "doctahs" to the rank and file.

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Each issue of Electrified Industry is packed with pictures of new-and-improved ways to keep industry prosperous by greater use of electric power.

Power salesmen, using such printed helpers, keep their industrial customers running, and in that way improve the utility companies' net.

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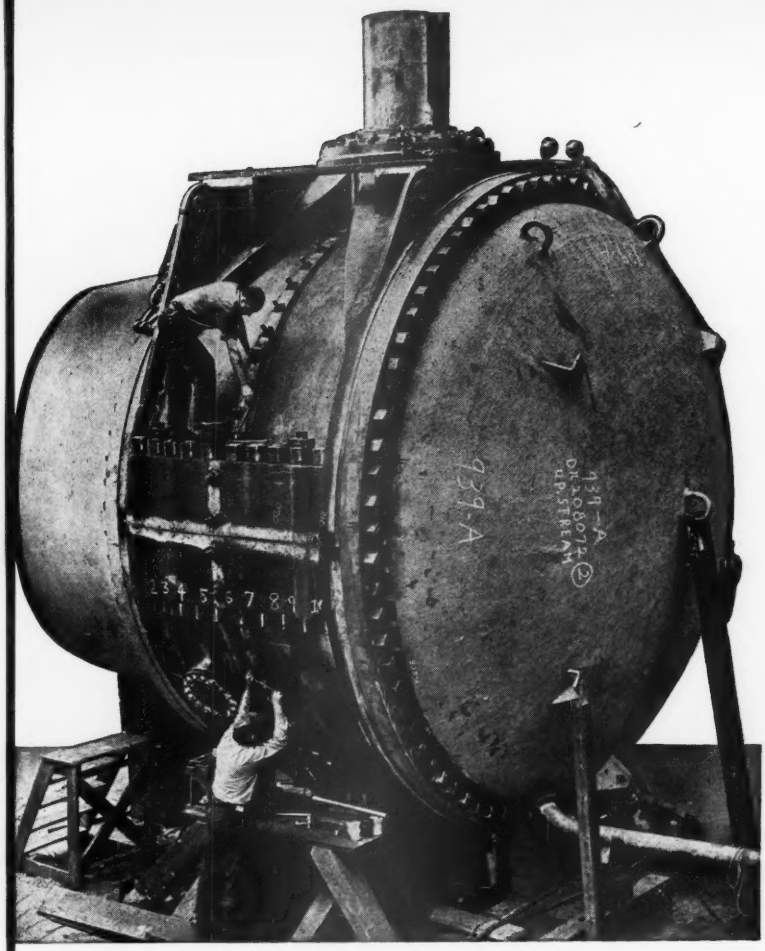

This 16-Foot Butterfly Valve Illustrates the type of work which Newport News takes in stride. Newport News built 3 such valves, each weighing 446,000 lbs., for the Ross Power Plant, Skagit Project, Department of Light, City of Seattle, Washington. Designed for a water flow of 3,620 cu. ft. per sec., and a hydrostatic pressure of 290 psi., these valves were shop tested by Newport News at 450 psi. They are hydraulically operated with oil at 1,500 psi. pressure. Shop tests assure speedy, trouble-free assembly of Newport News built equipment, on the site.

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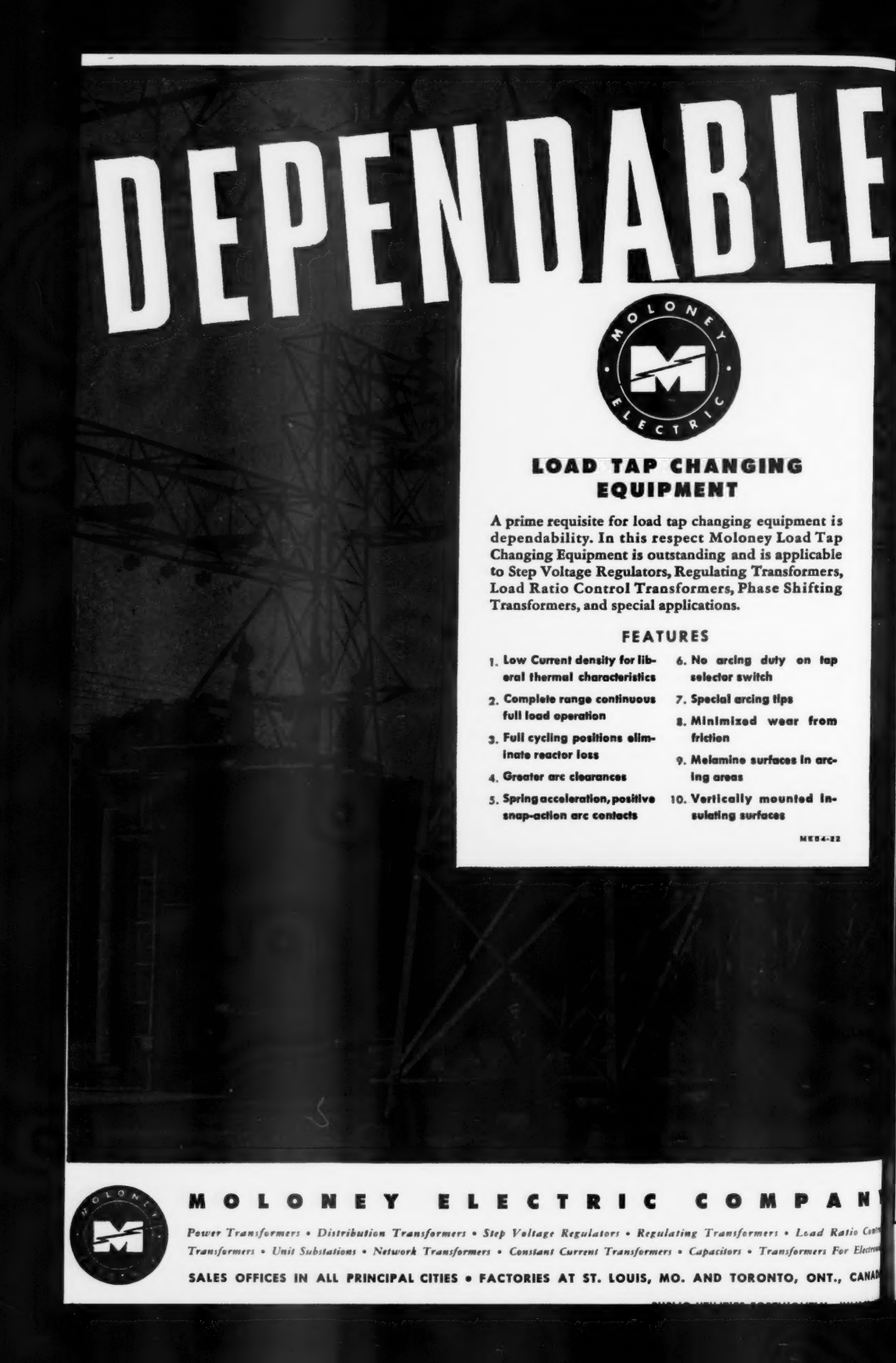

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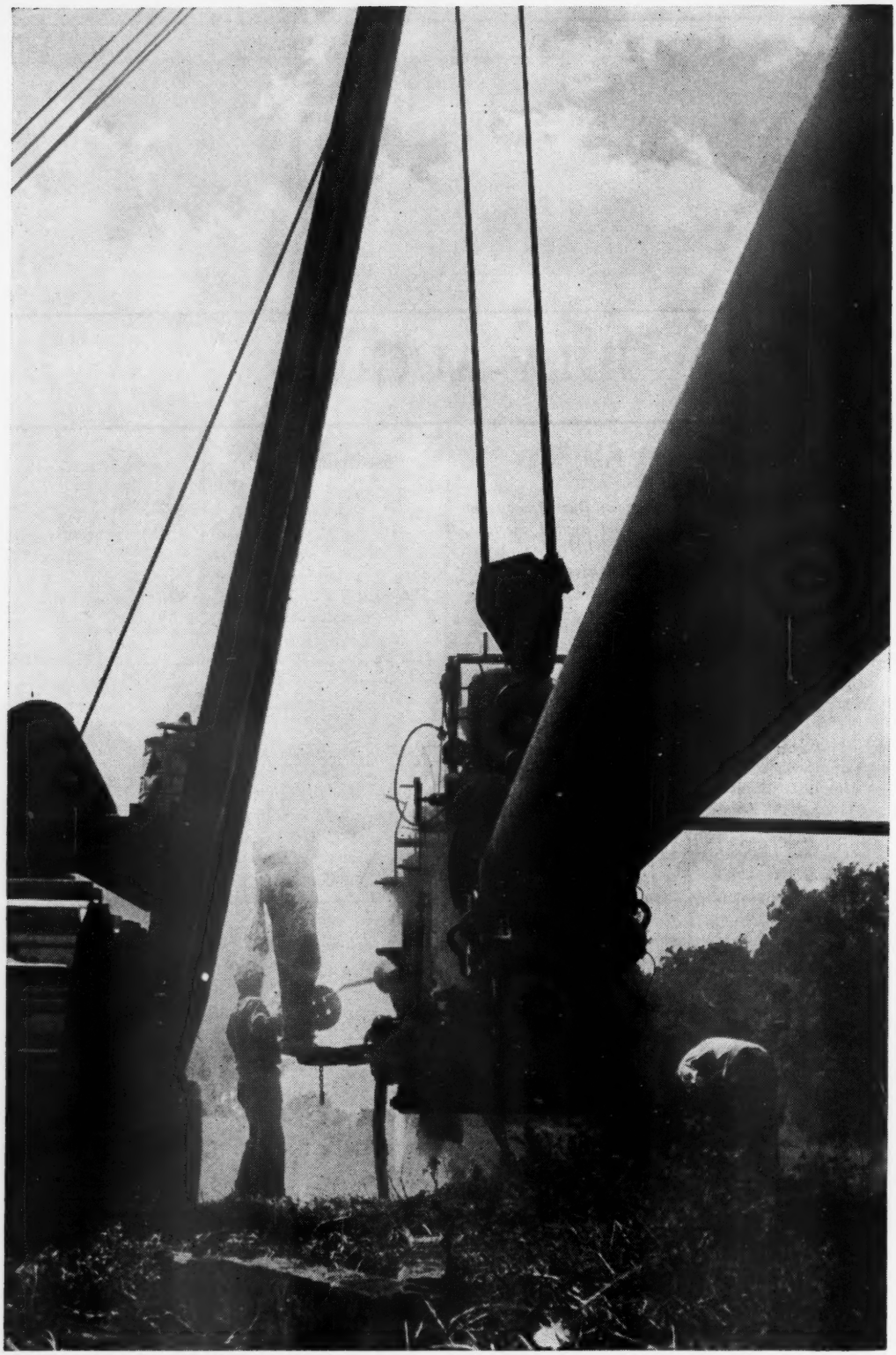
JULY-AUGUST

Thursday—22 *Ohio Rural Electric Co-operatives will hold meeting, Columbus, Ohio. Aug. 9, 10.* ***Advance notice.***	**Friday—23** *American Bar Association will hold annual meeting, Chicago, Ill. Aug. 15-20.* ***Advance notice.***	**Saturday—24** *Appalachian Gas Measurement Short Course will be held, West Virginia University, Morgantown, W. Va. Aug. 23-25.* ***Advance notice.***	**Sunday—25** *Word Power Conference begins sectional meeting, Rio de Janeiro, Brazil.*
Monday—26 *American Society of Mechanical Engineers will hold fall meeting, Milwaukee, Wis. Sept. 8-10.* ***Advance notice.***	**Tuesday—27** *Mid-West Gas School and Conference will be held, Iowa State College, Ames, Iowa. Sept. 8-10.* ***Advance notice.***	**Wednesday—28** *Pacific Coast Gas Association will hold meeting, Vancouver, British Columbia, Canada. Sept. 8-10.* ***Advance notice.***	**Thursday—29** *American Water Works Association, New York Section, will hold annual meeting, Montauk, Long Island, N. Y. Sept. 9, 10.* ***Advance notice.***
Friday—30 *Southern Gas Association begins general accounting conference, Chattanooga, Tenn.*	**Saturday—31** *Michigan Independent Telephone Association will hold annual convention, Grand Rapids, Mich. Sept. 9, 10.* ***Advance notice.***	**AUGUST** **Sunday—1** *National Audio - Visual Convention and Trade Show begin, Chicago, Ill.*	**Monday—2** *Pan - American Federation of Engineering Societies begins third convention, Sao Paulo, Brazil.*
Tuesday—3 *New Jersey Gas Association will hold annual meeting, Spring Lake, N. J. Sept. 10.* ***Advance notice.***	**Wednesday—4** *Rocky Mountain Electrical League will hold annual fall convention, Estes Park, Colo. Sept. 12-15.* ***Advance notice.***	**Thursday—5** *Independent Natural Gas Association of America will hold annual meeting, New Orleans, La. Sept. 13, 14.* ***Advance notice.***	**Friday—6** *National Association of Motor Bus Operators will hold annual convention, Chicago, Ill. Sept. 14-18.* ***Advance notice.***



Courtesy, Northern Indiana Public Service Company

New Service Line for the Midwest

Applying a protective coating to a 22-inch gas pipeline in Indiana.

Public Utilities
FORTNIGHTLY

VOL. 54, NO. 2 JULY 22, 1954

Electric Companies Have Eyes On the Future

Here is a thought-provoking account of the relative growth of various appliances in the metropolitan areas. What steps are the electric companies taking to anticipate and provide for changes in America's living habits?

BY A. BRYAN MARVIN*

CURIOSITY about the future has been part of mankind's mental make-up since men began to think.

In ancient Egypt, the Bible tells us, young Joseph made his mark with a 14-year crop forecast based on the Pharaoh's dreams about fat cows and thin cows. The early Greeks foretold the future by rolling sets of lopsided dice and by examining the kidneys of animals slaughtered at the temples.

The Romans used to set great store by the mutterings of a priestess which were so garbled that a priest had to translate. And, according to history, some Romans felt there was a certain amount of political motivation in the pagan priest's "interpretation."

Astrology, palmistry, and tea-leaf reading are still going occupations today, but in only a few rare instances do they control the direction of either national policy

*Press relations and public information staff, Consolidated Edison Company of New York, Inc. For additional personal note, see "Pages with the Editors."

or business policy. This is the age of science.

The scientific approach to business forecasting is founded on economics.

While every industry is interested in what the future will bring, the electric light and power industry's interest is the keenest. Other industries have an item called inventory where they can tuck away their errors of judgment.

The plant that turns out the crossbar element for pogo sticks can stockpile the crossbars for a few months if there is a slump in sales, and then draw on this stock to meet a sudden rush of unexpected orders. If the tenants of a planned new office building have to stay in their old offices a few extra months waiting completion of the building, there may be a little grumbling but blood won't flow in the streets.

However, electricity moves with the speed of light, 186,000 miles a second, and when it is gone, it is completely gone.

A failure in the electric supply endangers health, industry, commerce, and safety. In America today, a power blackout is a major catastrophe.

And there is no practical way to store electricity in useful quantity. It must be produced at the same time it is being consumed.

This means that each area must have its new generating stations, new distribution lines, and new equipment built right on schedule in advance of rising demand.

It puts local utility companies into the forecasting business with a vengeance. They not only have to know if their customers are going to need more electricity but they have to know where and when the need will arise. A new generator in one part of the state cannot always serve a new customer in another part. There is a distance beyond which it is impractical to transmit electricity.

With this thought in mind, electric companies keep a close watch on their service areas. They keep a tabulation of population trends. They tally the total of electric customers they must serve. (This figure rises along with the nation's population—the electric industry added its 50,000,000th customer early this year.) They study the changing requirements of customers from season to season and year to year.

The reports come in to the planning section from many sources. Sales groups report new construction. Billing information, on analysis, yields customer information. And distribution engineers keep watch over cable voltages.

The cables that spread through a company's service area form a nervous system that can tell headquarters of difficulty. When there is too much load on a cable, the voltage begins to falter.

But by this time, the trouble is already in existence. The planning group has missed the area's growth. It has succeeded if the reinforced cables in the street are able to supply the new machinery or buildings without voltage troubles.

A kilowatt of demand at the end of feeder system represents at least a kilowatt of capacity all the way back through transformers, substations, and high lines to the generating station. And while a builder can put up a house in a matter of months, it takes an electric utility up to six years to install a kilowatt of capacity.

A utility company's prophet automati-

cally becomes a student of the economic history of the area his company serves. He turns into a veritable human filing system, gathering all available information. He watches such items as disposable consumer income, instalment credit, business inventories, farm income, home building activity, new family formation which precedes the home building, government contract awards, freight shipments, as many of the various government and trade association figures as he can apply to his own particular area.

If a single industry predominates in the company's service area, the forecaster may very well become an expert in a field totally separate from utility work. If there is a multitude of industries, his interest will be spread a little more thinly but it will be just as intense.

In studying industrial figures, the forecaster needs a sixth sense. Every new order sets up a chain of orders filtering through the economy. Appraising the importance of a request for a certain amount of steel, for example, is a skilled task. Relating the over-all activity induced by the order to the electric industry is a chore where a smattering of genius is vital.

Say the steel (after it is converted from carloads of coal and ore) goes to make screws. These screws will be used in turn to produce furniture. But the only statistic available to the forecaster is the order for steel. He has to guess at the total activity of the operation. And he has to guess again when it comes to the impact in terms of motor hours and lamp hours on his company.

In the case of residential electric requirements, the forecaster has to be something of a sociologist. He must be intimately acquainted with such local subjects as weather, shopping habits, commuting timetables, office hours, and social customs. Observation of a religious holiday by even a minority of the customers will affect load characteristics.

The last half-century has seen a domestic revolution. Labor-saving devices have altered the electric requirements of every home. And while the number of wired homes has more than doubled since 1929, appliance use has skyrocketed, as the following saturation table indicates:

	Per Cent Saturation In 1929	*Per Cent Saturation In 1953*
Vacuum Cleaners	44	60
Radios	40	98
Toasters	37	72
Refrigerators	9	90
Ranges	4	26
Television	—	63

Television has had a spectacular effect

¶ "While *every industry is interested in what the future will bring, the electric light and power industry's interest is the keenest. Other industries have an item called inventory where they can tuck away their errors of judgment. . . . However, electricity moves with the speed of light, 186,000 miles a second, and when it is gone, it is completely gone. A failure in the electric supply endangers health, industry, commerce, and safety.*"

on America's living habits ("TV and the Electric Industry," PUBLIC UTILITIES FORTNIGHTLY, March 12, 1953). But so did the refrigerator, the radio, and the range.

From the forecaster's point of view, the various appliances are merely load that will have to be supplied. And while there were nineteen appliances in general use in the American home in 1929, there were thirty-six in use in 1950. Ten more have been added since that count, and the list will undoubtedly grow.

Room coolers are on the upswing all across the country. The heat pump is being manufactured and components for central air-conditioning plants are available for the home. The industry does not know from which quarter the next appliance development will come, but it is sure that there will be a new appliance and that home power consumption will rise.

THE Edison Electric Institute's electric power survey committee has added up the estimated peak loads of individual power systems to get an idea of national capacity requirements and adequacy. The sum of the 1954 estimates is 88,424,000 kilowatts. In 1955 the peaks total 95,978,000 kilowatts, while in 1956, according to the estimate, the figure will reach 102,875,000 kilowatts.

To keep up with this growth, the industry spent a record $2,850,000,000 on plant additions in 1953 and contemplates spending $3 billion in 1954. These expenditures are being made on the basis of forecasts and analyses made all across the country by individual utility company forecasters. A utility company must not be caught short.

But a new generating unit is not simply switched into service with a brief ceremony whenever load growth requires it. There is a construction bill and a manufacturer's bill that must be paid. This payment involves investors. The forecaster's estimate of the future must undergo a thorough examination in the market place where investors are offered a multiple choice of growth and income prospects. Investors are not responsible for providing additional funds the way a utility must provide service to all customers who request it.

Therefore, there is another factor that a local electric utility fears almost as much as not having enough generating and distributing capacity to meet its utility responsibility. This second-worst eventuality consists of having more than is needed.

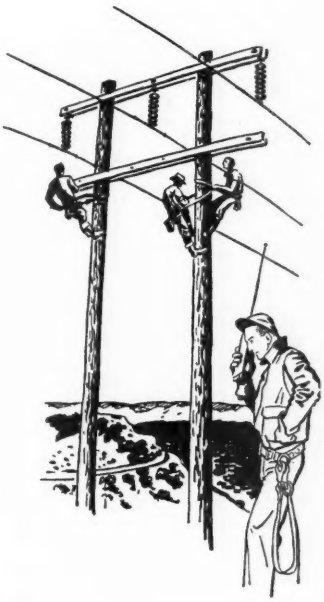
IF it were financially feasible to overbuild plant, every utility in the country would be overbuilt. However, while regulation limits the net return a company can earn on its investment in plant facilities, *that same regulation never guarantees the company a profit.* The companies live on a one-way street. They can never make more than a certain percentage, but they can make less (or even lose money) by poor forecasting and planning.

The expense of these errors must be made up by the stockholders, who might understandably be a little distressed. Money tied up in bricks and steel is almost as perishable as an egg. It decays unless the plant is put to work. And both an old egg and a useless dollar are lost to civilization for all time.

The utility company forecaster rides constantly on this dilemma's horns. If the industries in his area are going to suffer economically, he would very much like to

Locating Future Service Plant

"PLANNING an electric system does not consist of merely subtracting the present capacity from the load forecast and then telephoning an equipment manufacturer for supplies to make up the difference. Geography plays a big part in the planning process. It is important to locate a source of generation in relation to the load it will serve. Just as the forecaster analyzed the territory segment by segment in order to build up his forecast, the planning operation requires a progressive breakdown of the forecast in order to separate the growth or contraction elements and translate them into cable systems and generating station sites."



know about it five or six years in advance in order to adjust his predictions.

Whole industries have risen only to fall again in the course of American history. Whaling, cotton, street railways, and manufactured gas can be cited as examples. Technological advances in other fields have made the economic rôle played by each of these less important. So the forecaster has to be alert to pick up from the side lines such a threat to one of his customers.

And the forecaster must always remember that the mechanization of American industry would have taken place even without the introduction of electric power. The original industrial revolution was based on the steam engine and on machinery which displaced hand labor. The electric industry, with its swift, flexible, and convenient power supply, is more a result of the mechanization than the cause of it and even the electric industry has no assurance that future developments will not menace its economic stature.

No one knows this better than the forecaster. He is contantly watching for a dip in demand which may indicate that a leveling-off process is under way.

THERE is a great deal of talk about business cycles these days. This has undermined many a forecaster's reputation. To hear some tell it, all the would-be prophet has to do is analyze past performance and determine the period of the activity cycle. Then, assuming that boom is followed by slump, he only has to extend his figures into the future and his forecast is made.

It is true that many activities have a cyclical pattern in which slump and boom alternate on a nonseasonal basis. These businesses are rather like a pendulum swinging between good times and bad at regular intervals. But when a major upset comes along it can halt the pendulum in mid-swing or even slide the weight up or down to change the length of the period. And these times of upset are just the ones when the forecast is needed most.

A forecaster lives in fear of complacency. If he misses a prediction on a logical basis, it is an error that anyone could have made. If he misses because of too much trust in a cycle that didn't follow expectations, he will wonder ever after about his own adequacy for the job.

THERE is another element that figures in his nightmares. This is a many-sided monster called the load factor. When the customer buys and installs a room cooler, for example, the forecaster figures it as a fat kilowatt of demand.

But if the customer does not switch on the unit, the kilowatt goes unused. If he turns on the room cooler for two hot days during a summer electric peak, the kilowatt of capacity will work for those two days and then spend the rest of the year lounging around the generating station consuming large quantities of fixed charges in the form of interest, rent, and insurance.

The situation is beyond the control of the forecaster. Even companies that cnarge penalty rates for service have not deterred customers from installing low load factor equipment. It's an old American custom to get things if you want them badly enough to pay for them.

The complete forecast includes the element of load factor and it then becomes an integral part of the utility company's plans. Perhaps an old-time dynamo can be saved from the wrecker's torch and used to supply the new room cooler for the few hours it operates. Or overload capacity can be built into new machinery to carry the company over its peak hour.

PLANNING an electric system does not consist of merely subtracting the present capacity from the load forecast and then telephoning an equipment manufacturer for supplies to make up the difference.

Geography plays a big part in the planning process. It is important to locate a source of generation in relation to the load it will serve. Just as the forecaster analyzed the territory segment by segment in order to build up his forecast, the planning operation requires a progressive breakdown of the forecast in order to separate the growth or contraction elements and translate them into cable systems and generating station sites.

Finally, the forecast is turned into blueprints and purchase orders. But its author's responsibility is not over. There is a building period measured in years lying ahead.

Some unexpected economic or sociological factor can bob up at any time.

He must continually review his forecast. Expensive overtime shifts can sometimes rush a job to completion if the forecaster underestimated its urgency. Or funds can be conserved by letting construction proceed at a more leisurely pace than normal if the forecaster overestimated the need.

With overexpansion on one side of the channel and underexpansion on the other

side, the forecaster's job is that of a pilot, steering the utility on a precise course along a widening and meandering river. His navigation tools are statistics and economics.

AMERICAN electric utility companies have grown at an amazing rate since service was inaugurated in the 1880's. Growing pains accompanied the early rapid expansion.

But in recent years, the industry has demonstrated the value of experience gained in its youth. World War II and the postwar boom found the electric companies keeping up with a rising demand that caused material shortages up and down the economic pattern of the country. The electric industry's achievement in this respect is a tribute to the skill of its pilots —the forecasters—and to the competence of its captains—the managements.

"Enough to Do on"

"HAVING spent my first five years out of school as an engineer for the Tennessee commission, I have been interested in and have followed regulatory trends and decisions. The Florida commission's approach is the most fair and sensible I have ever known. The application of this simple formula will always make it possible for a utility to finance and give good service and grow in advance of the community.

"This formula should appeal to you folks because now you can figure out, even without a slide rule, what the Florida companies' earnings should be in any future year if you know the estimated capital requirements. The simplicity of this formula reminds me of answers I used to get from my Tennessee roommate whose father was an east Tennessee farmer. When I asked him how many hogs they raised, he would say 'Oh I don't know—enough to do on.' If I were to ask him how much corn they raised, I got the same answer, 'Oh, I don't know, enough to do on.'

"I would rather operate under a regulatory policy that gives us enough 'to do on' than to chance the highly speculative, conjectural, and unrealistic reproduction cost theory reduced by some estimated depreciation theory.

"I have always thought that the old, moth-eaten, legalistic methods of trying rate cases based on Smythe v. *Ames was too time consuming, nerve racking, too damaging to public relations, and seldom satisfied either the public or the investor. The pendulum seemed to swing from right to left and left to right, depending upon the economic cycle and political expediency.*

"The importance to the public of the ability of a utility to finance and keep up with a growing community cannot be overemphasized. It ranks along with good service. We must be able to raise money regardless of the economic cycle or political pendulum, should our service requirements demand it.

"Since V-J Day, we have sold approximately $104,850,000 of securities. Our total debt and equity capital on April 30th was $198,879,000. It will approximate $435,000,000 when we reach 1,500,000-kilowatt capability. . . .

"I believe we were the first utility to use an adjustment clause in residential and small commercial schedules for the purpose of covering wide fluctuations in costs of fuel as well as other items. Fuel adjustment clauses in industrial schedules have been in wide use for many years. Our adjustment clause was first included in all of the residential and small commercial schedules in May, 1946, when a rate reduction of over 10 per cent was made. The adjustment was first based upon fuel oil, but when fuel oil rose so rapidly, it was determined that the fuel oil base by itself was inequitable so that a new clause was put into effect based in part on fuel oil and in part on the wholesale commodity index. The fuel oil increment just about takes care of increase or decrease in oil costs. The commodity part is supposed to cover other items of cost. . . ."

—McGREGOR SMITH,
Chairman of the board, Florida Power & Light Company, in an address before The New York Society of Security Analysts.

Planned Development of Public Airports

It has been almost a decade since the commercial aviation industry and government regulatory authorities came to practical grips with a comprehensive plan for developing a national system of public airports. What has happened since the National Airport Plan was authorized in 1946? Annual revision, based on 3-year forecasts, has given the plan a high degree of flexibility, so as to make the necessary adjustments for changing political and economic conditions.

By J. C. D. BLAINE*

THE National Airport Plan, authorized by the Federal Airport Act of 1946,[1] is a comprehensive plan for the development of a national system of public airports in keeping with the present as well as the anticipated needs of the nation's civil aviation. Proposed airport development projects must be selected carefully because once they are accepted as part of the plan, they become eligible for inclusion in the Federal-aid Airport Program.

The act requires the Administrator to prepare and revise the plan annually. It authorizes, in the aggregate, $520,000,-

*Associate professor of business administration, North Carolina University School of Business Administration. For additional personal note, see "Pages with the Editors."

[1] Federal Airport Act of May 13, 1946, 60 Stat 170, as amended.

000[2] to be spent over a period of twelve years,[3] beginning with the fiscal year ending June 30, 1947. Seventy-five per cent of the appropriations, available for allocation to projects within the continental United States, must be apportioned among the states in accordance with the formula prescribed by the act.[4] The remaining 25 per cent must be placed in a discretionary fund which may be used for additional federal expenditures in connection with selected airport projects in states without regard to the apportionment formula.

The federal government's share of the allowable costs of projects, in connection with class III and smaller airports, must be 50 per cent, whereas its share must not exceed 50 per cent in the case of projects involving class IV and larger airports. The Administrator must obtain the permission of Congress to include these class IV and larger airport projects in the program when the annual expenditures will exceed $50,000.[5]

Public agencies, separately or jointly, may submit project applications to the Administrator and may accept grant offers from the federal government, unless they are specifically prohibited from doing so by state laws. The Administrator, before approving airport projects, must receive assurances as to the availability of the airports for military and public uses, proper maintenance, adequate safety measures, the provision of rent-free space for federal agencies, and proper airport records.

[2] This amount includes the authorized annual appropriations, in the aggregate, of $500,000,000 for projects in the several states as provided by § 5(b) and the authorized annual appropriations, in the aggregate, of $20,000,000 for projects in the Territories of Alaska and Hawaii, and in Puerto Rico and the Virgin Islands, as provided by § 5(c).

[3] Public Law 846, 81st Congress (approved September 27, 1950), extended the life of the Federal-aid Airport Program for five fiscal years, up to June 30, 1958.

[4] Federal Airport Act, *op. cit.*, § 6 (49 USCA 1105).

[5] Public Law 445, 81st Congress (approved February 9, 1950).

An Analysis of the Annual Revisions Of the Plan

THE National Airport Plan of 1947,[6] the first to be published, was based on a 3-year forecast of the needs of civil aviation. It proposed the construction and/or improvement of 4,431 airports at an estimated total cost to federal and non-federal agencies of $985,800,000. New airports represented 58 per cent of the total number of projects and were estimated to cost $378,900,000 or 38 per cent of the estimated costs of all projects included in the plan. Airports scheduled for improvement made up 43 per cent of the number of all projects and 62 per cent of the estimated total costs.

Emphasis was placed on smaller airports, because of the expected expansion in private flying. Class III and smaller airports made up 94 per cent of the total number of proposed new airports and 86 per cent of their estimated costs. They also accounted for 78 per cent of the airports scheduled for improvement and 37 per cent of the estimated expenditures allocated for this purpose. Class I airports, the smallest in this group classification, accounted for 67 per cent of all new airports proposed and for 34 per cent of the estimated costs allocated for new airport construction. Class I airports did not represent as large a share of the proposed improvements to existing airports. They made up 27 per cent of all airports for which improvements were planned and 5

[6] *The National Airport Plan, 1947* (Washington: Civil Aeronautics Administration).

per cent of the estimated total costs allocated for such projects.

The class IV and larger airports accounted for only 0.5 per cent of the number of proposed new airports and 14 per cent of the estimated costs of all new airports proposed in the plan. They represented a more significant part of the improvement phase of the plan, accounting for 21 per cent of the number and 63 per cent of the estimated costs of these projects.

THE basic pattern, set forth in the 1947 National Airport Plan, was followed in the subsequent annual revisions. Certain adjustments in policy were necessary to meet the needs of the postwar conditions and uncertainties. The effects of these changes were clearly evident in the 1951 revision.[7] It contained a new classification of airports, based upon their service needs, which replaced the numerical classification. This was done to better correlate the design of the airports with the types of aircrafts used or to be used by the carriers operating to and from them.[8] The need for multirunways at many airports had decreased because of technological developments, and the policy was adopted of granted federal assistance only for the construction of single runways, unless the need for additional

[7] *National Airport Plan, 1951* (Washington: Civil Aeronautics Administration).

[8] Technical Standard Order No. 6a, "Runway Strength and Dimensional Standards for Air Carrier Operations" (Washington: Civil Aeronautics Administration).

TABLE I

THE DISTRIBUTION OF PROPOSED PROJECTS AND ESTIMATED COSTS OF THE NATIONAL AIRPORT PLAN, AS CONTAINED IN THE REVISIONS, FOR THE YEARS, 1947 TO 1952

(Combined Costs to Federal Government and Local Sponsors)
(Values Given in Millions of Dollars)

Distribution	*1947*	*1948*	*1949*	*1950*	*1951*	*1952*
Total:						
Number of Projects	4,431	4,835	4,977	5,093	4,945	4,815
Index	100.0	109.1	112.3	114.9	111.6	108.7
Estimated Costs	$985.8	$1,048.5	$1,115.3	$928.0	$662.0	$650.6
Index	100.0	106.4	113.1	94.1	67.2	66.0
New Airports						
Number of Projects	2,550	2,745	2,794	2,777	2,288	2,232
Percentage of Total	57.5	56.8	56.1	54.5	46.3	46.4
Index	100.0	107.6	109.6	108.9	89.7	87.5
Estimated Costs	$378.9	$425.6	$424.6	$357.3	$178.2	$191.0
Percentage of Total	38.4	40.6	38.1	38.5	26.9	29.4
Index	100.0	112.3	112.1	94.3	47.0	50.4
Improvements to Existing Airports						
Number of Projects	1,881	2,090	2,183	2,316	2,657	2,583
Percentage of Total	42.5	43.2	43.9	45.5	53.7	53.6
Index	100.0	111.1	116.1	123.1	141.3	137.3
Estimated Costs	$606.9	$622.9	$690.7	$570.7	$483.8	$459.6
Percentage of Total	61.6	59.4	61.9	61.5	73.1	70.6
Index	100.0	102.6	113.8	94.0	79.7	75.7

Source: Data were compiled from National Airport Plan, for the respective years, as published by the Civil Aeronautics Administration, Washington, D. C. (Percentages and indices calculated.)

Note: The percentages shown in this table have been rounded to the nearest whole number when used in the context of this paper.

runways was clearly demonstrated. In addition, the proposed airport projects were carefully screened in keeping with the requirements of national defense. New airports were included to provide for the separation of joint military and civil operations at military airports and to meet the rapidly expanding activities of military and civil aircrafts.

The number of projects increased with each revision up to and including the 1950 revision, when they reached a total of 5,093. (Table I, page 70.) This was approximately 15 per cent greater than the number proposed in the 1947 revision. The proposals dropped to 4,945 and 4,815 in the 1951 and the 1952 revisions, respectively. The latter figure was only 9 per cent greater than the number set out in the 1947 revision.

THE estimated total expenditures of the plan, as shown in its annual revisions, reached a maximum of $1,115,300,000 in the 1949 revision. This was approximately 13 per cent above the estimated costs in the 1947 revision. Following the 1949 revision, the estimated total expenditures declined with each revision, reaching $650,600,000 in the 1952 revision. This was equal to 66 per cent of the estimated expenditures in the revision for 1947.

There was evident, throughout the several revisions, a gradual shifting of emphasis as between new airports and improvements to existing airports. This became more pronounced in the 1951 revision. The number of proposed new airports remained relatively constant for the 1948 through the 1950 revisions, following an initial increase of about 8 per cent in the 1948 relative to the 1947 revision. The number dropped for the first time in the 1950 revision. There was a gradual decline in the percentage of the proposed new airports relative to the total number of projects up to the 1952 revision. The rather large reduction in the number of new airports in the 1951 revision reduced the percentage, which this type of project made of all projects, to approximately 46 per cent. This relationship was maintained in the 1952 revision, although the actual number of proposed new airports declined.

A SIMILAR pattern is discernible in the allocation of the estimated total costs to the proposed new airports in the several revisions. The small increase of 12 per cent in the 1948 relative to the 1947 revision, was followed by a slight cutback in the 1949 revision. The decline continued, reaching $178,200,000 in the 1951 revision, which was equal to 27 per cent of the estimated total costs of the 1951 plan. Prior to the 1951 revision, new airport proposals accounted for between 38 and 41 per cent of the estimated total costs of the several revisions, whereas after the 1950 revision they accounted for less than 30 per cent.

The distributions of the number of projects and of the estimated costs of the proposed improvements to existing airports are the reciprocals of those relative to proposed new airports. The number of projects for improvements to existing airports made up an increasingly greater percentage of the total number of projects contained in each revision subsequent to 1947, with the exception of the 1952 revision. These projects accounted for between 43 and 46 per cent of the number of all projects prior to the 1951 revision,

TABLE II

DISTRIBUTION OF PROPOSED PROJECTS AND ESTIMATED COSTS OF NEW AIRPORTS AND IMPROVEMENTS TO EXISTING AIRPORTS, BY TYPES OF AIRPORTS, AS CONTAINED IN THE REVISIONS OF THE NATIONAL AIRPORT PLAN FOR THE YEARS 1947 TO 1952

(Combined Costs to Federal Government and Local Sponsors)

Proposed New Airports

	Class III & Smaller		*Class IV & Over*		*Others*	
Year	*Number*	*Cost*	*Number*	*Cost*	*Number*	*Cost*
1947	93.5	85.7	.5	13.8	6.0	.5
1948	89.0	77.7	.6	21.2	10.4	1.1
1949	86.5	74.5	.8	23.0	12.7	2.5
1950	87.5	73.9	.9	23.4	11.6	2.7
1951	85.5	80.6	.6	14.4	13.9	5.0

	Primary, Secondary, And Feeder		*Trunk, Express, And Continental*		*Others*	
Year[1]	*Number*	*Cost*	*Number*	*Cost*	*Number*	*Cost*
1951	85.2	79.1	.9	15.9	13.9	5.0
1952	81.6	68.5	1.1	25.8	17.3	5.7

Improvements to Existing Airports

	Class III & Smaller		*Class IV & Over*		*Others*	
Year	*Number*	*Cost*	*Number*	*Cost*	*Number*	*Cost*
1947	78.0	36.9	21.4	63.1	.6	.02
1948	74.7	35.0	23.2	64.8	2.1	.2
1949	73.2	32.6	24.9	67.0	1.9	.4
1950	73.8	35.6	23.7	63.9	2.5	.5
1951	80.8	41.1	16.6	58.4	2.6	.5

	Primary, Secondary, And Feeder		*Trunk, Express, And Continental*		*Others*	
Year[1]	*Number*	*Cost*	*Number*	*Cost*	*Number*	*Cost*
1951	81.5	39.7	15.9	59.8	2.6	.5
1952	82.2	39.5	15.8	60.1	2.0	.4

Source: Data were compiled from National Airport Plan, for the respective years, as published by the Civil Aeronautics Administration, Washington, D. C. (Percentages calculated.)

[1] The 1951 revision of the National Airport Plan adopted the new classification of airports based on service uses to replace numerical classification. The dual classification is here given to indicate the degree of conformity existing between the groupings used in this table.

Note: The percentages shown in this table have been rounded to the nearest whole number when used in the context of this paper.

whereas in the 1951 and the 1952 revisions, they accounted for approximately 54 per cent.

The largest allocations, on the basis of the number of proposed projects as well as the estimated total costs, were consistently made in connection with the smaller airports. (Table II, page 72.) This was true for both new airports and improvements to existing airports, although there was evidence of shifts in emphasis as between class IV and larger airports, other airports and class III and smaller airports.

THE new airports in the class III and smaller group declined as a percentage of all new airports proposed in each revision, with the exception of the 1950 revision. This percentage relationship declined from 94 per cent to 82 per cent. The percentage of the estimated costs of the proposed new airports allocated to the smaller airports declined in each revision, except the 1951 revision. The decline was from 86 per cent to 69 per cent.

The percentage of the proposed new airports allocated to the class IV and larger group experienced small increases in each revision, except the 1951 revision, rising from 0.5 per cent to 1.1 per cent. Similar changes occurred with respect to the percentage of the estimated costs of proposed new airports allocated to this group. The percentage, in this instance, rose from 14 per cent to 26 per cent.

The pattern was different for proposed projects for improvements to existing airports. The number of projects, relative to class III and smaller airports, decreased with each revision prior to 1950. The percentage of the number of projects for improvements, allocated to the smaller airports, declined from 78 per cent to 73 per cent. Beginning with the 1950 revision, it increased successively, attaining 82 per cent in the 1952 revision. A similar pattern was followed by the percentage of the estimated costs of all improvements to existing airports in the class III and smaller airport group. It declined from 37 per cent in the 1947 revision to 33 per cent in the 1949 revision, after which it increased to 40 per cent in the 1951 and 1952 revisions.

THE opposite held with respect to class IV and larger airports. The number of proposed projects for improvements in this group increased from 21 per cent of the total number of projects for improvements in the 1947 revision to 25 per cent in the 1949 revision, but declined thereafter. This percentage relationship stood at approximately 16 per cent for the 1951 and the 1952 revisions. The percentage of the estimated costs allocated for improvement projects rose from 63 per cent in the 1947 revision to a maximum of 67 per cent in the 1949 revision. Following the 1949 revision, it dropped to 64 per cent in the 1950 revision and thereafter remained at about 60 per cent.

Increased emphasis was given to proposed construction of other airports (new seaplane bases and heliports). The percentage which they made of the total number of proposed new airports increased with each revision, except the 1950 revision. The range in this case being between 6 per cent and 17 per cent. The percentage of the estimated total costs allocated to these facilities increased in each revision, rising from 0.5 per cent to approximately 6 per cent.

Slight gains were experienced by proposed projects having to do with improve-

ments to existing other airports. Following the 1947 revision, the number of proposed projects leveled off to around 2 to 2.5 per cent of all projects for improvements to existing airports and the percentage of the estimated costs allocated for such improvements to between 0.2 to 0.5 per cent.[9]

The Federal-aid Airport Program

FUNDS are provided through the Federal-aid Airport Program for the

[9] The published revision of the National Airport Plan for 1953 does not contain as extensive information as do the previously published revisions of the plan. It is a list of locations from which the Administrator will approve projects for inclusion in the Federal-aid Airport Program for the current year. The locations contained in this revision were selected in accordance with the Interim Airport Planning Standards issued by the Civil Aeronautics Administration in August, 1952. This list contains 2,233 locations which include 2,107 airports and heliports for development within the continental United States. Of these, 325 are planned new facilities. Ninety-eight of the 109 heliports are for construction in the United States. The list does not include any airports which have been or are being developed for which there is no foreseeable need for further development during the present planning period. (Source: *National Airport Plan, 1953*, Washington: United States Department of Commerce, Civil Aeronautics Administration, page 1.)

TABLE III

FEDERAL FUNDS APPROPRIATED AND AUTHORIZED UNDER THE FEDERAL-AID AIRPORT PROGRAM, FOR THE FISCAL YEARS 1947 TO 1952
(Millions of Dollars)

Distribution	*1947*[1]	*1948*	*1949*	*1950*[2]	*1951*[3]	*1952*[4]	*1947-52*
FAAP Appropriations	45.0	32.5	40.0	39.5	24.2	18.7	199.9
Administrative Purposes	2.2	1.8	3.0	3.0	3.0	2.7	16.1[7]
Allocation for All Projects	42.8	30.7	37.0	36.5	21.2	16.0	183.8
Territorial Projects	1.7	1.7	.5	.5	.7	1.0	5.8[5]
United States Projects	41.1	29.0	36.5	36.0	20.5	15.0	178.0[6]
Discretionary Fund	10.3	7.2	9.1	9.0	5.1	3.7	49.5[8]
Available for Apportionment ...	30.8	21.8	27.4	27.0	15.4	11.3	128.5[9]
			(*Percentages*)				
FAAP Appropriations	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Administrative Purposes	5.0	5.7	7.5	7.6	12.4	14.4	8.1
Allocations for All Projects ...	95.0	94.3	92.5	92.4	87.6	85.6	91.9
Territorial Projects	3.7	5.1	1.3	1.3	2.9	5.4	2.9
United States Projects	91.3	89.2	91.2	91.1	84.7	80.2	89.0
Discretionary Fund	22.8	22.3	22.8	22.8	21.2	20.0	24.7
Available for Apportionment ..	68.5	66.9	68.4	68.3	63.5	60.2	64.3

Source: Annual Report of Operations under the Federal Airport Act for the respective fiscal years as published by Civil Aeronautics Administration, Washington, D. C. (Percentages calculated.)

[1] Two appropriations were made in 1947 under Public Law 490 (79th Congress), one for $45,000,000 to carry out development work of airports and one for $2,975,000 to cover preliminary expenses for initiating program.

[2] 1950 appropriation contained authority to expend $11,500,000 to liquidate prior year contractual authority.

[3] 1951 appropriation contained authority to expend $34,000,000 to liquidate prior year contractual authority.

[4] 1952 appropriation contained authority to expend $10,000,000 to liquidate prior year contractual authority.

[5] Public Law 119 (approved June 23, 1949) withdrew $182,828 for administrative purposes with respect to Alaskan program.

[6] Amount available for allocation to projects reduced by $150,000 to meet increases in wages.

[7] Adjusted in accordance with amounts shown in footnotes (5) and (6).

[8] Public Law 382 (effective June 24, 1950) increased discretionary fund by $2,684,069, and also (effective June 30, 1950) by $2,272,555.

[9] Amount available for apportionment to states reduced by amounts shown in footnote (8).

Note: The percentages shown in this table have been rounded to nearest whole number when used in the context of this paper.

financing of the federal government's share of the approved projects included in the annual development program in connection with the National Airport Plan.

Fiscal year appropriations are made by Congress from which funds are made available to state and local sponsors through grant offers for airport projects approved by the Administrator.

EACH fiscal year's appropriation was merged with the preceding year's appropriation, beginning with the fiscal year 1948, and the accumulated appropriations were administered as a single fund. (Table III, page 74.) The accumulated appropriations for the period 1947 to 1952, amounted to $199,900,000 under the Federal-aid Airport Program. This was equal to approximately 40 per cent of the amount originally authorized by the Federal Airport Act. Only part of these funds is available for airport development projects, approved by the Administrator. The amount allocated for administrative expenses amounted to $16,100,000. Allocations for territorial projects equaled $5,800,000 for the period, leaving available for projects within the continental United States $178,000,000. Of this amount, $128,500,000 were available for apportionment to states, whereas $49,500,000 was the amount placed in the discretionary fund.

The appropriation of $45,000,000 for the fiscal year 1947 was the largest for any year under the Federal-aid Airport Program. The appropriations for 1948 dropped to $32,500,000, which was equivalent to 72 per cent of the previous year's appropriation. It rose to $40,000,000 for 1949, but declined thereafter, reaching $18,700,000 for 1952.[10] This was equal to only 42 per cent of the appropriations for 1947.

THE distribution of the fiscal year appropriations remained relatively uniform. The allocations for administrative purposes ranged between $1,800,000 for 1948 and $3,000,000 for 1949 through 1951. Projects outside the continental United States had allocated to them amounts ranging between $1,700,000 for 1948 and $500,000 for each year 1949 and 1950. The discretionary fund was increased annually, with allocations varying between $10,300,000 for 1947 and $3,700,000 for 1952. The amount available for allocation to states varied between $30,800,000 for 1947 and $11,300,000 for 1952. This was equal to 69 per cent and 60 per cent of the appropriations for these two years, respectively.

Federal funds[11] in the amount of $183,100,000 were allocated, during the period 1947-52, to 2,336 airport projects at 1,174 locations. Grant offers amounting to $182,000,000 were made in connection with 2,293 projects at 1,160 locations. Applications for seven projects at one location were rejected, involving an amount equal to $300,000. There were placed under grant agreements 2,286 projects at 1,159 locations, which obligated the federal government to them, as of

[10] The Federal-aid Airport Program, announced for the fiscal year 1952, provided for the development of 169 airports at a cost of $9,977,250 to the federal government. All of the funds were allocated for improvements to existing airports. (Press Release, July 29, 1952, CAA-52#37, "CAA Announces the 1953 Federal-aid Airport Program.")

[11] The financial analysis contained in this paragraph is based upon data contained in *Seventh Annual Report of Operations under the Federal Airport Act, 1952* (Civil Aeronautics Administration, Washington, D. C.).

June 30, 1952, for $181,700,000. This left approximately $2,000,000 of federal funds not obligated under grant agreement at the end of the period. The number of projects completed was 1,681. These were located at 983 places and cost $112,300,000, exclusive of state and local contributions. The total expenditures, under the Federal-aid Airport Program, for the period, equaled $131,900,000.

Summary

THE uncertainties and increased military requirements of the postwar period have retarded the progress of the National Airport Plan. This curtailment was to be expected, in that the plan is predicated upon the needs of civil aviation. The annual revisions, based upon 3-year forecasts of the requirements of civil aviation, have given it a high degree of flexibility, which has made possible adjustments to cope with the changing political and economic conditions affecting the state of the nation.

The 1951 revision was significant for the specific changes in policy. There occurred relatively large reductions in the number of proposed projects and in the over-all estimated costs of the plan. The number of projects reached a maximum in the 1950 revision and thereafter declined. Although the estimated costs of the plan reached a maximum in the 1949 revision, a more severe cutback took place with the 1951 revision than with the 1950 revision. Prior to the 1951 revision, the proposed new airports accounted for over 50 per cent of all projects and over 38 per cent of the estimated costs of the several revisions. With this revision, they made up less than 50 per cent of the number of projects and less than 30 per cent of the estimated costs. In contrast, the proposed projects for improvement to existing airports accounted for a larger percentage of the number of projects and of the estimated costs in the several revisions following the 1951 revision than before it.

INCREASED attention was given to the construction of proposed new airports relative to class IV and larger airports and other airports, although class III and smaller airports consistently accounted for the major shares of the proposed projects and their estimated costs in the several revisions. Increased emphasis was placed also on improvements to class III and smaller airports relative to class IV and larger airports.

The Federal-aid Airport Program reflects more directly the effects of changing conditions than do the annual revisions of the National Airport Plan. This is because the appropriations are approved upon a fiscal year basis to finance the current year's airport development program, whereas the annual revisions of the plan are based on 3-year forecasts of the public airport requirements for civil aviation. The latter necessarily covers a much longer period.

¶ "NATIONALISM cannot be abandoned if civilization is to last among free men."

—HERBERT HOOVER,
Former President of the United States.

Utilities' Future in Latin America

PART II

Over the long range, as well as the short range, the history and outlook for economic stability in Latin America present a picture of uncertainty if not confusion for the foreign investor. What is the philosophy behind the steady increase in nationalistic sentiment so critical of foreign investment? Could our own government's international and monetary policies be an influence?

BY HERBERT BRATTER*

DIRECTLY and indirectly the American & Foreign Power Company has benefited considerably from the loan operations of the Eximbank and the World Bank in Latin America. But those banks have not in every instance "played ball," it would seem, to the extent that the company desired. On the occasion of Argentina's 1950 loan negotiations in Washington covering a $125,000,000 credit from the Eximbank, the A&FPC tried to have the loan made contingent "on a fair settlement of our situation," but did not succeed. Since 1943 some 38 per cent of the company's investment in Argentina has been expropriated, seized, or intervened by the government. For these properties the Argentine government has offered to negotiate payment in blocked pesos.

In June, 1952, the Eximbank authorized credits totaling some $41,000,000 to seven American & Foreign Power subsidiaries in Brazil. In 1951 a Cuban subsidiary received a $12,000,000 loan. In 1948 twelve A&FPC subsidiaries in Brazil received

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nearly $8,300,000 of Eximbank aid.

Chile is a country where the American & Foreign Power Company has, to quote its president, "experienced severe difficulties arising out of the serious price and wage inflation and the inability . . . to obtain adjustment in . . . service rates to compensate for rising costs of operation." The unhappy situation led the company to try to sell its Chilean properties to the government. Negotiations were broken off by the Chileans in August, 1953, however, when it became apparent that the purchase of the properties would increase the government's foreign debt to the point of imperiling its capacity "to negotiate additional foreign loans for projects deemed essential to the country's economic development." This way out of the company's troubles has therefore been closed.

That the Foreign Power system sometimes has had to throw good money after bad to keep from losing investments it has already made, is made clear in company literature.[1]

Do the Washington Banks Protect Investors' Interests?

In making loans in Latin America for power purposes both the Eximbank and the World Bank are conscious of the interests already holding public utility investments in the countries concerned. Both institutions have assured the writer on this score. Since the two banks operate differently, their approach to this question varies. The Eximbank, for example, may make loans without the guaranty of the foreign government, whereas World Bank loans require—under the articles of agreement which created the institution—a governmental guaranty. One way or another the two banks, when lending for power purposes, seek to make sure that the electric utilities affected by the loans will receive fair treatment as to rates and the servicing of their financial obligations.

On this subject General Glen E. Edgerton, managing director of the Export-Import Bank, informed PUBLIC UTILITIES FORTNIGHTLY:

> In its consideration of loans to privately owned public utility enterprises in foreign countries the Export-Import Bank obtains assurances satisfactory to the bank that the competent governmental regulatory authority, if there is one, and if not, the government itself, has authorized or approved the project to which the loan is to be applied and is favorable to the successful operation of the utility as a private enterprise and to the extension of the proposed credit by the bank.
>
> The foreign governments concerned are not participants in the loan agreements, which are made between the Export-Import Bank and the utility company alone. Consequently no contractual obligation of the foreign government is obtained, but in appropriate cases the agreements stipulate that the necessary governmental authorization and approval shall be given prior to any disbursement by the bank.
>
> The questions of rate structure and adequacy of return on investment are basic in studying a loan application from a utility. If the existing and prospective rates are inadequate to provide the local funds required and to provide

[1] *Cf.* "The Foreign Power System," an address by W. S. Robertson, president of the American & Foreign Power Company, New York, September 16, 1953, page 13; also letter to shareholders, September 14, 1953.

also for the servicing of the loan, the bank either rejects the application or defers consideration until the deficiencies in the rate schedule are corrected.

THE World Bank, as part of its loan investigation when considering lending for power purposes, makes a thorough check of the current rate structure to determine whether it is adequate to permit the utilities concerned to meet operating costs and provide sufficient earnings to attract new capital. It also examines laws and regulations governing rates to ascertain their flexibility from the standpoint of permitting adjustments to meet changing conditions. If the findings are unfavorable, the bank discusses the matter with the government concerned; and if nothing is done to correct the conditions, the bank does not make a loan.

As to the World Bank's method of dealing with the subject Robert L. Garner, its vice president, stated to the writer:

> One of the jobs of the World Bank is to stimulate private investment. That is an obligation put on us by our charter, and one which we follow out of belief and conviction. As borrowers from the bank well know, we are—to say the least—reluctant to make loans in a country where unreasonable obstructions are put in the way of private investment, or where unreasonable burdens are put on private enterprises that already exist.

The bank's interest in obtaining equitable treatment for the private investor extends to both local and foreign capital. In cases where it lends to privately owned utility companies, the bank guards not only its own interests, but the legitimate interests of bondholders and shareholders, as well.

In dealing with situations arising from unwarranted governmental pressures on private enterprise, we can and do point out that a country which is obstructing private capital is also damaging its own credit with potential investors of all kinds. We discuss the problem with the government and attempt to persuade those concerned that the national interest is served by equitable treatment of private capital.

In the matter of utility rates, the bank has consistently pointed out to member countries the necessity for appropriate adjustments to enable a company to meet rising costs and maintain a level of earnings sufficient to attract new capital.

In a more general way the bank has argued against the widely held fallacies that "cheap power" is synonymous with public power, and that, therefore, all

¶ "IN *making loans in Latin America for power purposes both the Eximbank and the World Bank are conscious of the interests already holding public utility investments in the countries concerned. . . . Since the two banks operate differently, their approach to this question varies. The Eximbank, for example, may make loans without the guaranty of the foreign government, whereas World Bank loans require . . . a governmental guaranty.*"

electric facilities should be nationalized. The bank has demonstrated that whatever its ownership, a utility to operate efficiently and provide for expansion must have a sound rate structure. Lacking such a structure the alternatives are: a deterioration of the utility and its service, or a closing of the financial gap through taxes levied without regard to the extent to which the taxpayer may use the services of the utility.

THAT the efforts of the Eximbank and the World Bank have met with some success in obtaining fairer treatment of private electric power capital in Latin America is certainly true. What is equally clear, however, is that those efforts, supplemented by generous loans on easy terms, have not had the same degree of success in dispelling the hazards of electric power investors and thereby attracting adequate private capital from the United States. A privately owned public utility is not always the most popular enterprise in any community. Nationalism in Latin America has made the position of the foreign-owned utility precarious and unenviable. Under the circumstances most private capital here will be inclined to leave the Latin American power field to the Eximbank and World Bank.

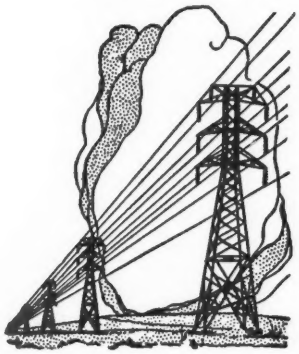
Both the Eximbank and the World Bank, it may be noted, were created to supplement rather than compete with private sources of capital. Thus, the World Bank's articles of agreement provide that it may, "when private capital is not available on reasonable terms," use its resources "to supplement private investment."

Even with the inflow of Eximbank and World Bank money for power development and with all the safeguards for private capital urged upon the government by the two banks, Mexico remains a country where private foreign investors continue to complain of unfair treatment. Agitators easily whip up public feeling against the foreign companies. A few years ago, when the writer was in Mexico, a consumers' strike against the power companies was taking place. One saw displayed in many residential windows in large cities signs reading (in Spanish): "Here we pay neither the light nor power bills."

INDICATIVE of the situation there after millions of dollars of Eximbank and World Bank loans were made for power, was the following news item from New York in *The Wall Street Journal* of October 13, 1953:

> American & Foreign Power Company, Inc., is still waiting for Mexican government action on applications of its subsidiaries in that country for electric rate increases.
>
> Company officials expect the Mexican Tariff Commission's ruling, when it comes, to afford some financial relief but not enough, because of the low exchange value of the peso, to encourage investment in plant expansion.
>
> Ten days ago the commission granted rate increases for the other major foreign power company operating in Mexico, Mexican Light & Power Company, a Canadian corporation. At that time immediate action on American & Foreign Power's pending applications was expected, but company officials here say nothing has happened as yet.

Because of the exchange situation, an 8 per cent rate of return after in-



Diminishing Private Investment in Latin America

"THE development of electric power in Latin America was once the exclusive task of private capital, first European and later largely North American; but that 'monopoly' passed with the great depression. With the growth of the Eximbank to giant proportions and the advent of the World Bank, the financing of Latin American power development has been supported mainly by public credit—the credit of the various governments concerned, in many cases, and in the last analysis the credit of the United States government."

come taxes, such as Mexico allowed for the Canadian firm, would not be adequate to put American & Foreign Power's properties on a sound financial basis, according to spokesmen for the U. S. company. They note that their investment of about $70,000,000 in Mexico, when figured in present-value pesos, provides a rate base equivalent to only about $42,000,000 and that an 8 per cent rate of return in pesos comes out to little more than 4 per cent when converted into dollars.

Decline of the peso hits their company harder than it does the Canadian firm, Foreign Power officials say, because a larger percentage of the Canadian investment was made in later years, after the peso's exchange value dropped.

Eximbank and World Bank As Rival U. S. Instruments

IT is reported to be the view of the present U. S. Treasury chiefs that the Eximbank should leave developmental loans—including electric power—to the International Bank for Reconstruction and Development. Although this may be the present policy, it remains to be seen whether it undergoes modification. Chairman Capehart of the Senate Banking and Currency Committee, which has under way a study of the Eximbank and World Bank under S Res 25, is reported to feel that Eximbank activities in the develop-

ment of Latin America should not be reduced.

The Milton Eisenhower report also bears on this point. It recommends "that public loans for the foreign currency costs of sound economic development projects, for which private financing is not available, go forward on a substantial scale, provided, of course, that the borrowers take the necessary measures to insure that they are good credit risks.

"It is generally agreed that the International Bank for Reconstruction and Development should have the principal responsibility for making development loans, as compared with the shorter-range lending operations of the United States Export-Import Bank. However, it seems essential that the United States maintain a national lending institution to make sound development loans which are in our national interest, but which might not be made by an international agency.

"One difficulty here is that the administration's efforts to balance the budget would be affected by large loans made by the Export-Import Bank, since such loans are a charge against the annual cash budget. The bank should, therefore, consider using the means available to it to raise more of its funds on the private capital market."

Apparently this refers to the fact that the lawyers have decided that Eximbank guaranties of loans do not count as a charge against the public debt limit. The credit of the U. S. is of course involved, but it constitutes a charge against the budget only if the guaranteed loan goes bad. Therefore, we may look for greater experimental use by the Eximbank of its guaranty powers than has been the case in the past.

"Mañana" and Other Headaches

IN 1940 Mexico promulgated regulations laying down the basis for a sound and equitable rate structure for power companies. The regulations set forth criteria for evaluating properties and establishing a reasonable return thereon. When the World Bank came on the scene after the war and began negotiations with the Mexican Light & Power Company, the government had not yet got around to applying the 1940 regulations. The bank expressed concern and, pending financial reorganization of the company, marked time on a loan. Finally, when the company's reorganization plan was completed, the Mexican government gave its formal assurance that it would rectify the rate structure. It is this rectification to which *The Wall Street Journal* article refers.

In a letter to the shareholders of the Mexican Light & Power Company dated October 1, 1953, Chairman of the Board George S. Messersmith gave details of the new arrangements. Tariffs were adjusted in December, 1949, to give the company a 6 per cent return after taxes. These rates proving inadequate, the company in October, 1952, applied for increases. Effective October, 1953—a full year later—increased rates designed to yield an 8 per cent return after income taxes came into force. Meanwhile, arrangements have been made with the government respecting the company's financial needs for its construction program through 1956, when the rate question will have to be re-examined.

PART of the economic squeeze to which privately owned utilities are subject in Latin America is due to the pressures of organized labor, with which the govern-

ments generally co-operate. Periodically, especially during the inflation of recent years, utilities have had to apply for relief from the effects of wage increases through higher service charges. For example, during 1952, as reported in the annual report of the Mexican Light & Power Company, a 15 per cent wage increase granted in 1950 was made definitive and another 10 per cent increase added, together with additional social benefits. The company's net increased costs of operation remained unfully covered by the rate increase granted it.

AMONG other problems is that of getting government permission to expand plant to keep up with growing demand. In Costa Rica the foreign-owned utility on one occasion asked permission to build a hydro plant for this purpose. The government, yielding to real or fancied public opinion, refused. Ultimately, when the demand for power became so pressing that something had to be done, the company received permission. But by then it was too late to start the slow process of building a hydro plant. Instead a steam plant was necessary. But a steam plant there must operate on expensive imported diesel oil. This means higher costs and higher rates for consumers; and more unpopularity for the foreign company.

Hydro power development in Latin America must contend with such adverse factors as irregular rainfall; the effects of deforestation; the danger of floods and rapid silting; sometimes porous soil permitting seepage, as in Mexico; high construction costs, with hydro sites often far from the market; economic and political instability. Despite Latin America's high hydro potential, such factors have tended to retard development.

LATIN American governments have become aware of the risks involved in too repressive an attitude toward foreign-owned utilities. To buy out a property, as was done by Argentina in the case of the IT&T holdings there, reduces the funds available to the government for other purposes. To seize property without prompt and adequate compensation, as Guatemala has done with United Fruit Company lands and, some fear, may do with the local American electric company, leads to bad diplomatic relations with Washington and tends to cut off the country from other economic aid. To operate a utility as a government enterprise is likely to lead to unpopularity with the public if it is not run better than under the foreign owners.

This has been the lesson learned in Cuba, since the government took over the Autobuses Modernos in the face of enor-

¶ "LATIN *American governments have become aware of the risks involved in too repressive an attitude toward foreign-owned utilities. To buy out a property, as was done by Argentina in the case of the IT&T holdings there, reduces the funds available to the government for other purposes. To seize property without prompt and adequate compensation . . . leads to bad diplomatic relations with Washington and tends to cut off the country from other economic aid.*"

mous wage demands from the employees. The service rendered became worse under government management, a fact of which the President of the Republic had to take official cognizance.

Disturbing Note from Brazil

FOREIGN investors in Brazilian utilities were more than a little disturbed by President Getulio Vargas' informal announcement at a meeting of state governors in December that Brazil planned a country-wide federal power company to be called Eletrobras. Mr. Vargas was quoted as saying:

> I must tell you that up to a certain point, in this connection, I am being sabotaged by the contrary interests of private establishments which have already profited much in Brazil and which have in cruzeiros 200 times the capital which they invested in dollars and they are continuing to transform our cruzeiros into dollars in order to transfer them abroad under the name of dividends. Instead of dollars they produce cruzeiros and these cruzeiros are being changed into dollars and they are flowing abroad. Either we should create funds necessary to establish a national electric energy industry on a firm foundation, or we shall have to take over establishments which are not giving the desired results.

Whether the "bite" will prove as bad as the "bark" only time will tell.

Conclusion

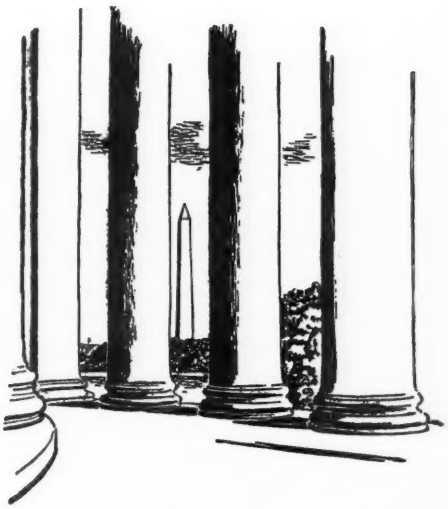
THE development of electric power in Latin America was once the exclusive task of private capital, first European and later largely North American; but that "monopoly" passed with the great depression. With the growth of the Eximbank to giant proportions and the advent of the World Bank, the financing of Latin American power development has been supported mainly by public credit—the credit of the various governments concerned, in many cases, and in the last analysis the credit of the United States government. Efforts to obtain participation of private Latin American capital in the financing of expansion of foreign-owned electric utilities have had favorable but very inadequate results, where they have succeeded at all.

With Latin American countries facing a vast further growth of demand for power in the struggle to raise the living standards of an "exploding" population, the desire for financial help from Washington is bound to continue and to expand. At the same time a greater contribution will have to be made by the Latin American countries themselves, mostly through compulsory surcharges on the consumers' power bills.

"IT is the wisdom, the forward-looking capacities of our businessmen that are going to make America and keep America the healthy economic organism that will bring the happiness and progress to our people."

—DWIGHT D. EISENHOWER,
President of the United States.

Washington and the Utilities



Ike Explains TVA Stand

PRESIDENT Eisenhower told his press conference in Washington on June 30th that he had directed the Atomic Energy Commission to seek power from a private utility to gain time in a study of the future of the Tennessee Valley Authority.

TVA projects, he said, had moved to the periphery of its area and he knew of no way to limit its boundaries. While reiterating that he was going to support TVA on its purposes as written in federal law, he thought the best thing to do was to study it from every angle to determine how far the region could be built up at the expense of other areas.

Later, the Joint Committee on Atomic Energy rejected a move by Democratic members to halt the contract the President ordered the AEC to negotiate with private utilities. The committee also rejected Democratic efforts to write into atomic legislation a ban on any similar contracts in the future.

The President's directive, conveyed by the Bureau of the Budget to the AEC, approved a proposed contract between the commission and the Middle South Utilities, Inc., and the Southern Company for a $1,205,000 steam plant at West Memphis, Arkansas. Power from this plant would be fed into the TVA system to replace some 600,000 kilowatts of energy now being supplied by TVA to the atomic installation at Paducah, Kentucky.

Democrats accused the President of using the AEC as a vehicle for cutting down TVA for the profit of private power interests. President Eisenhower said it looked like a good thing to buy the power privately while taking a look at future TVA expansion. He recalled that representatives of some states, including New York and Massachusetts, had protested that their taxes were being used to build up cheap power in the South and causing industries to move from the North.

THE controversy over the proposed power supply contract between AEC and the private utility company combination touched off another public *versus* private power scrap when the amendments to the Atomic Energy Act reached the floor of both chambers. But the critics of the contract could find no immediate way to block it after the Joint Committee on

Atomic Energy defeated an attempt to "disapprove" the contract. The vote of the committee was unofficially reported to be 10 to 7.

But the public power bloc in Congress had another opportunity to exploit the issue in hearings to be held before the Senate Judiciary Committee's subcommittee on monopoly, headed by Senator Langer (Republican, North Dakota). Langer's investigation was supposed to be designed to insure that the contract did not eliminate lawful competition or foster monopoly. But actually Langer, joined by two Democratic Senators, rushed through a subcommittee resolution asking AEC to stop further negotiations, pending its inquiry.

Regulatory Appointments

PRESIDENT Eisenhower continues to follow the pattern of his earlier appointments to federal regulatory commissions by drawing heavily from state regulatory commissions. His replacement of Federal Power Commissioner Dale E. Doty, whose term expired last month, is another case in point. The President nominated Frederick Stueck who was a former chairman of the Missouri Public Service Commission (1941-43). Senate confirmation is generally assured in such cases.

Stueck was named for a full 5-year term. He qualifies as a Republican and will be, assuming confirmation, the third member of that party on the FPC—the others being Chairman Kuykendall and Commissioner Draper. Commissioner Digby qualifies as a Democrat from Louisiana, while Commissioner Nelson Lee Smith is classified as a political Independent. Stueck had been engaged in private law practice at Clayton, St. Louis county, Missouri, from 1929 to 1941. He resigned from the Missouri Public Service Commission to enter military service with the U. S. Army in World War II. He has been vice president of the Transit Casualty Company in St. Louis and served as administrative assistant to ex-Governor Forrest Donnell, Republican of Missouri.

The Senate confirmed the renomination of John C. Doerfer to a full term on the Federal Communications Commission. Doerfer, who got a full 7-year term, had previously been the chairman of the Wisconsin Public Service Commission.

Other state commissioners nominated to federal regulatory posts by President Eisenhower have been Chairman Kuykendall of the FPC, who was formerly chairman of the Washington Public Service Commission; John H. Winchell, named to the Interstate Commerce Commission, formerly chairman of the Colorado Public Utilities Commission; and Owen Clarke, a former chairman of the Washington Public Service Commission, also named to the Interstate Commerce Commission. FPC Commissioner Digby was formerly conservation commissioner in Louisiana.

Hoover Task Force Hearings

THE Hoover Commission Task Force on Natural Resources has held its last of a series of regional hearings. This task force, under the chairmanship of Admiral Ben Moreell, will now prepare its recommendations for a final report of the Hoover Commission, to be presented to the next Congress.

Strong support for the administration's partnership policy and for nondiscriminatory sale of federal power was registered before the Hoover Task Force hearings on June 28th and 29th by representatives of numerous civic groups and private utilities of the region. One basic point stressed

was that growing power requirements could be met dependably only if financial resources of all parties were utilized to stretch available federal dollars and provide an adequate development program.

Annual power facility capital needs were estimated at over $200,000,000 and the only practical way to get such large sums was said to require the joint efforts of all concerned.

Opposition to the partnership plan followed largely political lines or represented viewpoints of extreme public power elements demanding continuation of an all-federal program and maintenance of public preference without change. Main opposition theme was the contention that only a federal program could result in comprehensive development of the Columbia river.

Another proposal advanced by spokesmen of the Northwest Public Power Association was creation of a federal corporation to replace the Bonneville Power Administration, with authority to issue revenue bonds to finance projects and carry on power aspects of river development.

Speakers urging recognition of the place of local private and public agencies included representatives from Seattle, Portland, and Spokane chambers of commerce and the Washington State Power Commission. Proponents of the all-federal program included spokesmen of the CIO and AFL and advocates of a high federal dam at Hell's Canyon.

THE joint statement presented by the Pacific Power & Light, Portland General Electric, and Washington Water Power companies recommended: (1) on federal multipurpose projects, where installation of power facilities is economically feasible, federal policy should permit and encourage financing such facilities by local agencies; (2) federal government should be prepared to finance nonreimbursable features where local agencies are prepared to finance power features; (3) opposed creation of any single new government agency having authoritarian power over regional development; (4) decision whether to be serviced by public or private agency is local matter and federal government should neither attempt to influence local choice nor discriminate in treatment of local areas because of choice made (preference clause should be changed); (5) transfer of ownership of federal generation and transmission would not increase power supply and pressing problem is to construct new facilities; (6) local agencies should be responsible for building necessary transmission lines to generating facilities they own and there should be no duplication by government.

Also recommended were realistic allocation of costs, accurate accounting practices, fair and uniform administrative procedures, rates which make provision for full payment of state and local taxes, and consideration of all other taxes paid by investor-owned utilities. The group also expressed the view that creation of any review board would only add one more bureau which must review projects, and held that Federal Power Commission and Congress had adequate authority.

The statement pointed out that all systems in the region are co-ordinated through the Northwest Power Pool and that all new projects proposed would be similarly co-ordinated to maintain integrity of comprehensive development plan.

THE three companies serve 610,000 electric customers in Oregon, Washington, Idaho, Montana, and Wyoming. They have 941,000 kilowatts of generating capacity and $426,000,000 of plant investment, of which $250,000,000 has been added since the war.

Wire and Wireless Communication

NLRB Rule Changes

THOUSANDS of small business concerns, including small telephone companies, have apparently been virtually exempted from the provisions of the Taft-Hartley Law by changes in the rules of the National Labor Relations Board, announced June 30th. Under the new rules, the NLRB will restrict its jurisdiction to larger companies and will no longer handle many of the smaller cases it formerly processed. It was estimated that the board's present 14,000-a-year case load would be cut by 15 to 20 per cent.

The rule changes are in line with the announced policy of NLRB Chairman Guy Farmer. Farmer has stated repeatedly that "Uncle Sam's long arm has reached out to assert itself over too many labor-management" disputes that should be settled at state or local levels. A cut in NLRB's case load will enable the board to spend more time on important cases, Farmer said. Failure of both employers and unions to meet the new tests for NLRB jurisdiction will mean that many cases will go to state labor relations boards for solution. This is likely to complicate matters, since jurisdiction as between federal and state labor relations boards is cloudy. In some cases, the Supreme Court has ruled that states do not have jurisdiction over cases where the NLRB has voluntarily waived federal jurisdiction.

The new rule changes include the following:

1. Raise from $25,000 to $50,000 a year the direct outflow of interstate business required to bring a company under NLRB jurisdiction.

2. Raise from $50,000 to $100,000 a year the goods or services that must be supplied to interstate commerce to bring the supplying company under board jurisdiction.

3. Require that the suppliers' goods must ultimately go outside the state or that the services supplied be part of "the stream of interstate commerce."

4. Require that intrastate trucking companies and similar companies which are "links in interstate commerce" do at least $100,000 worth of business a year for other interstate companies to come under NLRB jurisdiction.

5. Abolish a provision permitting a company to come under NLRB jurisdiction if the combined dollar volume under the various categories is more than the dollar volume required in any one category.

6. Abolish a provision for NLRB jurisdiction over general or public office buildings merely because the tenants are under board jurisdiction.

7. State that a franchise from a national enterprise will not be sufficient allowance to bring a company under NLRB jurisdiction.

An NLRB spokesman said that other rule changes further narrowing the board's jurisdiction are under study. The changes are expected to be opposed by labor unions which have generally favored federal, rather than state, handling of labor relations problems.

Senate Group Approves Bricker Bill

THE Senate Interstate Commerce Committee has approved the Bricker Bill (S 3542) prohibiting transmission of gambling information in interstate commerce. Public hearings on the bill last month gave the telephone industry an opportunity to recommend certain changes in the legislation which are reflected in the measure as reported by the committee. The adopted amendments made some minor alterations in the language of the bill and added a completely new section to the bill. The new section provides that no damages, penalty, or forfeiture shall be found against any common carrier for any act (such as disconnection) done in compliance with written orders from civil jurisdiction such as the state, federal, or local law enforcement agencies.

The exact language of the section reads as follows:

> The leasing, furnishing, or maintaining of any communication facility for the transmission of gambling information in interstate or foreign commerce is prohibited. When any common carrier, subject to the jurisdiction of the Federal Communications Commission, is notified in writing by a federal, state, or local law enforcement agency, acting within its jurisdiction, that any facility furnished by it is being used or will be used for the purpose of transmitting or receiving gambling information in interstate or foreign commerce, it shall discontinue within a reasonable time, or refuse, the leasing, furnishing, or maintaining of such facility, but no damages, penalty, or forfeiture, civil or criminal, shall be found against any common carrier for any act done in compliance with any such notice. Nothing in this section shall be deemed to prejudice the right of any person affected thereby to secure an appropriate determination, as otherwise provided by law, that such facility should not be discontinued or removed, or should be restored.

ASSISTANT Attorney General Warren Olney III explained that one amendment changes the definition of gambling information by making it apply specifically to horse- or dog-racing events. This was to avoid any possibility that the statute would be applied to such things as the baseball ticker service which Western Union provides. Olney said such sports as prize fighting and baseball, which could conceivably involve the sending of gambling information over communication facilities, "Cannot be organized and controlled in the same fashion that horse racing can be." They were therefore not included in the language of the bill.

High Court May Review Antiutility Statute

THE U. S. Supreme Court may be asked next fall to rule on the validity of a state public utility antistrike law. The case involves a labor dispute between the Arnold Bus Line of Arlington, Virginia, and an AFL bus drivers' union. The un-

ion called a strike after contract negotiations failed in December, 1952. Under Virginia's antistrike act, the state then took over operation of the company.

The Virginia statute, revised in 1952, permits the governor to order a public utility seized and operated by the state corporation commission if a work stoppage at the utility threatens the state's welfare and safety. The Richmond circuit court turned down an appeal by the union for a preliminary injunction against the state and held the antistrike act "valid in all respects." Subsequently, after the state had returned control of the company to its owners, the union's appeal was rejected by the state supreme court of appeals on grounds that there was no controversy and no jurisdiction.

Virginia revised its antistrike act in 1952 in order to remove any doubts of constitutionality resulting from a U. S. Supreme Court opinion the preceding year invalidating a Wisconsin public utility antistrike law. One of the two measures enacted in 1952 separated labor relations from seizure powers of the state over public utilities. Under the revised measure, the state can seize a public utility when any stoppage of service for any reason endangers the public health, welfare, and safety. The other 1952 Virginia enactment provides that the state department of labor and industry shall be the state agency to mediate and conciliate labor disputes. It requires notices of thirty days of labor disputes between certain public utilities and their employees.

ABOUT a dozen states now have varying types of utility antistrike laws, most of them enacted originally in 1947. Florida's antistrike law was ruled unconstitutional last year by the state supreme court. What action the U. S. Supreme Court takes with respect to the Virginia case will attract widespread interest, in view of the fact that proposals for further enactment of such laws are expected next year, when the legislatures of 44 states will convene in regular session.

CWA Holds Annual Convention

THE eighth annual convention of the CIO Communications Workers of America, held in Cleveland, Ohio, last month, produced few surprises. CWA President Beirne claimed a total union membership of 300,000 and cited as one of the major high lights of the year the signing of a "no-raid" agreement with the American Federation of Labor.

Resolutions approved by the convention touched on a variety of subjects, ranging from collective bargaining objectives to foreign policy. Among the more important resolutions were those calling for repeal of the Taft-Hartley Act, repeal of state "Right to Work" laws, opposition to measures legalizing wire tapping, expansion of TVA's steam-generating capacity, and contact with telephone industry management with a view to forming labor-management committees to examine the problem of employment opportunities in the telephone industry.

In a lengthy resolution dealing with collective bargaining, CWA included as its objectives the elimination of wage differentials for the same job classification, broader health insurance coverage, and improvement in pension plans. The practice of making deductions from company pension payments as an offset for social security payments was sharply criticized. The convention urged all of the CWA locals to establish Political Action Committees and encouraged $1 contributions from each union member.

Financial News and Comment

BY OWEN ELY

Recent Trends in Utility Financing

TOTAL utility financing in the first quarter of this year was somewhat heavier than last year, over half of the increase being accounted for by $54,000,000 refundings and $11,000,000 divestments. The amount of equity financing ran well under last year, and preferred stock issues were also lower, with bonds making up the difference.

While complete returns have not yet been compiled for the second quarter, the trend seems to be about the same. Many utilities are trying to avoid equity financing this year, possibly with the idea that if they avoid dilution of earnings this will offset any declines or irregularities in net income resulting from the business recession—now happily almost over. On the other hand, one or two companies such as Florida Power & Light have been encouraged by the strength of the market to do equity financing which could have been longer deferred.

The bond market has been more of a problem than the stock market this year. It suffered a rather severe case of congestion some weeks ago, both corporate and municipal offerings having been pushed out rather too fast. The story also circulated in Wall Street that the large insurance companies had decided not to buy any issues (even the best names) below a 3 per cent yield basis. Whether or not this was true, nine out of fourteen utility bond issues in the month of May were slow or "sticky" and concessions had to be made by underwriters to move some issues. The remaining five issues—all yielding 3 per cent or more—were readily sold. The preferred stock offerings fared a little better, only two out of six issues moving slowly.

IN June the corporate bond price index recovered almost to the high level of early May, but trended down again despite strength in government issues and improved action by the municipal market. (See historical chart on security yields, page 93.) Accordingly, the new issue market remained rather drab with six out of twelve bond utility issues moving very slowly and two rather slowly. Only three issues were able to "go out of the win-

DEPARTMENT INDEX

dow," which is Wall Street argot for a very successful offering. The last of these was the $16,000,000 Aaa Duquesne Light 3⅛s priced to yield a flat 3 per cent. (The Consumers Power 3s, rated double A and offered at par, had been less successful two days earlier.) In June, the electric utility companies refunded some $35,000,000 bonds and $21,000,000 preferred stock, considerably less refunding than in May.

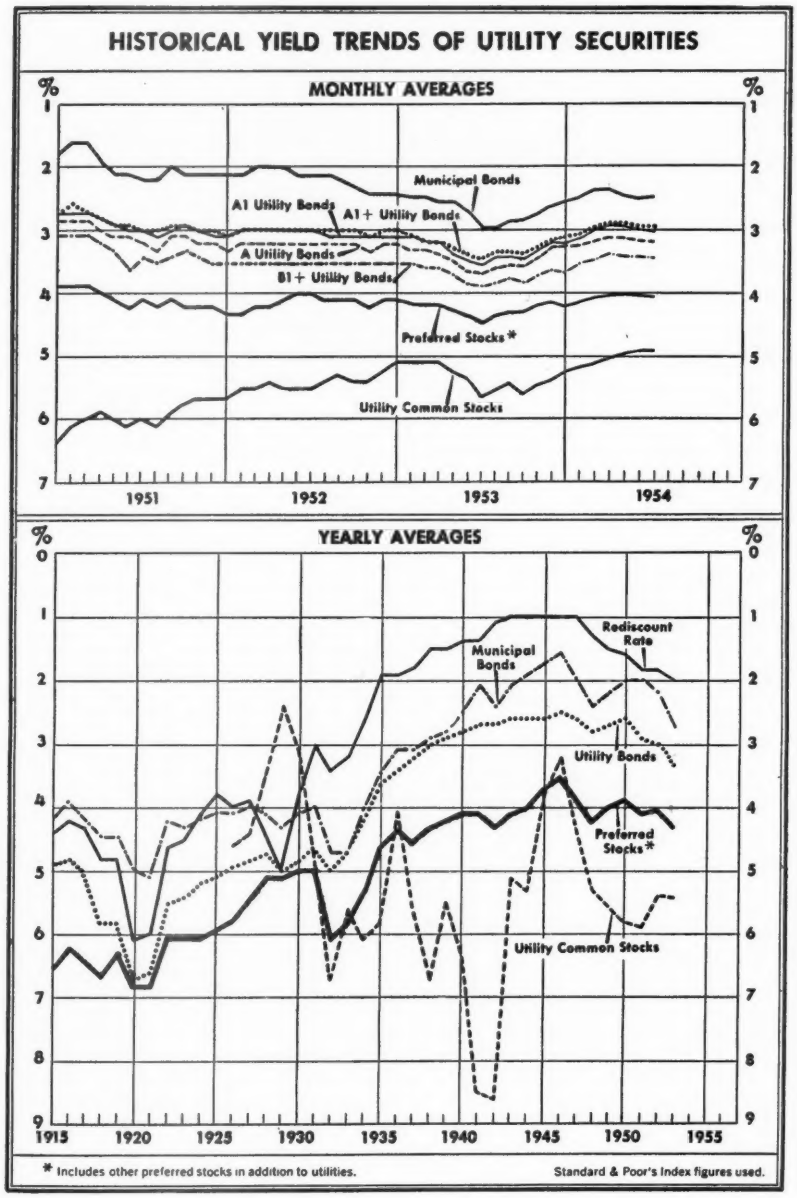
Looking over the common stock offerings in June, it is interesting to note that there now seems less tendency to underwrite subscription offerings. The only two important issues, Philadelphia Electric's $32,000,000 offering and Connecticut Light & Power's $8,000,000, used the dealer compensation method pioneered by General Public Utilities. The Philadelphia issue was 96 per cent subscribed, the issue being priced at 34, a discount of about 11 per cent from the prevailing price the day before the rights were offered and 15 per cent below the year's high.

IN the case of the Connecticut issue the company wanted to set its offering price at a discount of about 25 per cent below market price on a 1-for-10 basis. However, this was opposed by the Connecticut Public Utilities Commission, which pointed out that in a 1953 rate case it had determined the "fair cost" of common stock money to be 9.05 per cent. This was based on an investor appraisal at 6 per cent, a pay-out ratio of 78 per cent, and underpricing of 15 per cent. Adjusting this to the current yield of 5.3 per cent, a pay-out of 77 per cent, and a 15 per cent discount, the fair cost became 8.1 per cent. On a *pro forma* basis for 1954, assuming all preferred and common shares had been outstanding for the entire year, pay-out would rise to 85.4 per cent, which would lower equity cost still further to 7.35 per cent (the other figures remaining unchanged).

THE commission mentioned the success of recent rights offerings by Hartford Electric Light and Housatonic Public Service and concluded:

> . . . there appears to be no reasonable expectation that the shares of this company will be accepted with anything less than the enthusiasm which has marked its past financial operations during periods when earnings compared with current earnings, and with the same enthusiasm with which other issues have been received by shareholders of other companies who are, to some extent at least, identical with those of the Connecticut Light & Power Company. . . . If the yield of 6.9 per cent proposed by the company is taken as the fair valuation of the company's share in the minds of its investors, it will mean that we find as a fact that present shareholders consider the shares of sufficient risk that they will entrust their funds to the company only at such a rate of return on their investment.

Accordingly, the commission decided that the company had been unduly conservative and that a discount of 15 per cent should be ample to cover cost of financing and underpricing. The commission indicated that this was based, in part, on the testimony of an expert witness for the company who had studied the amount of underpricing on 47 issues of 19 companies considered comparable, and on which the average discount was about 7½ per cent below the price prevailing at the beginning of the subscription period. The witness had qualified this observation to conclude that a complete allowance for all factors of underpricing would be in the area of 10-15 per cent.


HISTORICAL YIELD TRENDS OF UTILITY SECURITIES
MONTHLY AVERAGES
%
Municipal Bonds
A1 Utility Bonds
A1+ Utility Bonds
A Utility Bonds
B1+ Utility Bonds
Preferred Stocks*
Utility Common Stocks
1951
1952
1953
1954
YEARLY AVERAGES
Rediscount Rate
Municipal Bonds
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Preferred Stocks*
Utility Common Stocks
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1955
* Includes other preferred stocks in addition to utilities.
Standard & Poor's Index figures used.

The commission pointed out that its concern over the offering price resulted from (1) the effect on the ratepayers if they are to be called upon to service more shares than necessary; (2) potential future effect on an estimate of the fair cost of common equity for this company in the event of future rate proceedings; and (3) the effect on the continuing willingness of investors to entrust funds to this company when more capital is needed.

THIS decision presents a rather novel point of view and would seem to be one of the few cases in which a regulatory commission has protested against a low subscription price. Some large, successful utilities with high equity ratios have made a practice in the past of fixing low subscription prices and thus giving valuable rights which have been in the nature of extra dividends. It would seem more consistent with good financial practice to keep dividend pay-out separate from the financing of new issues, and not to mix the two as has sometimes been done in the past. On the other hand, the company should fix a subscription price which will give the rights more than the "nuisance value" of one thirty-second or one sixty-fourth, and also to determine the least expensive method of issuing rights. By using devices such as dealer compensation, oversubscription, employee subscription, etc., it may be possible to avoid underwriting. In some cases in the past where there have been heavy oversubscriptions, underwriting could perhaps have been eliminated. Of course where there is no alternative to the financing, underwriting may be essential as insurance against market risks.

A Fair Value Balance Sheet

DESPITE the increasing extent to which "fair value" is being used by state regulatory commissions, due to the severe impact of inflation on the utility economy, only one company appears to have published a fair value balance sheet for the benefit of its stockholders. Iowa-Illinois Gas & Electric Company in its 1953 report to stockholders presents two balance sheets—one the usual type based on original cost of plant, and the other reflecting fair value of plant and explanatory in nature. Amounts are given both in dollars and in per share figures.

Under plant account the first item reads "land, buildings, and equipment comprising the generating, transmission, and distributing facilities of our electric system representing a depreciated book cost of $50,595,830 have a present fair value of $67,263,905." Thus the fair value of the electric plant is about one-third more than net original cost, while the percentage increase for the gas plant works out at 50 per cent. The estimates of fair value were prepared by using the Illinois Commerce Commission order of last September (in the company's rate case), the Handy-Whitman utility construction cost indexes and the Ford Bacon & Davis appraisal of the company's properties in Illinois, and generating and transmission properties in Iowa and Illinois. The resulting equity value of the common stock was $28.40 as compared with $14.50 based on original cost.

THE fair value balance sheet was presented to show the shareholders the effect of fair value on the equity, and to make it possible to express earnings and dividends as percentages of fair value. The share earnings of $2.35 in 1953 represented a return of 8.3 per cent on the fair value common stock equity and the dividend reflected a yield of 6.3 per cent.

The company recently issued a little booklet entitled "What Is 'Fair Value' and

JUNE UTILITY FINANCING

PRINCIPAL PUBLIC OFFERINGS OF ELECTRIC AND GAS UTILITY SECURITIES

Date	Amount	Description	Price To Public	Underwriting Spread	Offering Yield	Moody Rating	Indicated Success of Offering
		Mortgage Bonds and Debentures					
6/9	$10.0	Southwestern G. & E. 1st 3¼s 1984 ..	101.54	.48C	3.17%	A	a
6/10	12.0	Mountain Fuel Supply S. F. Deb. 3⅜ 1974	99.25	1.00N	3.18	A	a
6/16	5.0	Central Ill. P. S. 1st 3¼s 1984	102.25	.60C	3.13	A	b
6/16	6.0	Jersey Central P. & L. 1st 3¼s 1984 ..	102.13	.58C	3.14	A	b
6/22	4.0	Central Vermont P. S. 1st 3¼s 1984 ..	100.96	.90C	3.20	A	d
6/22	25.0	Tenn. Gas Trans. 1st s.f. 3⅝ 1974	101.79	.70C	3.50	A	d
6/23	10.0	Gulf Power 1st 3¼s 1984	102.63	.58C	3.11	A	d
6/23	35.0	Panhandle Eastern Pipe Line S. F. Deb. 3⅛ 1974	99.63	.89N	3.15	A	d
6/23	5.0	Washington Gas Light 1st 3¼s 1979 ..	100.00	.73C	3.25	A	c
6/25	25.0	Consumers Power 1st 3s 1984	100.00	.32C	3.00	Aa	d
6/29	40.0	Columbia Gas System S. F. Deb. 3½s 1979	101.63	1.21C	3.40	A	d
6/30	16.0	Duquesne Light 1st 3⅛s 1984	102.46	.23C	3.00	Aaa	a
		Preferred Stocks					
5/24	1.0	Kansas-Nebraska Natural Gas $5	101	4.00N	4.95	—	a
6/7	5.0	Central Maine Power Conv. 4.6% ..	100	2.25N	4.60	—	e
6/17	10.0	Connecticut L. & P. $2.06	50	.95N	4.12	—	a
6/22	25.8	Pacific G. & E. 4.50% ($25 par)	25.75	.57N	4.37	—	a
6/24	6.0	Duquesne Light 4.10% ($50 par) ..	51.25	1.09C	4.00	—	d
6/24	2.0	Maine Public Service 4.75% ($50 par)	50	1.40N	4.75	—	a
6/30	15.0	P. S. of Indiana 4.16% ($25 par) ..	25	.38	4.16	—	a
						Earnings-Price Ratio	
		Common Stocks—Subscription Rights					
5/24	2.0	Kansas-Nebraska Natural Gas	23	f	5.22	6.76	—
6/1	.2	West Ohio Gas	10	g	8.00	8.06	—
6/8	32.1	Philadelphia Electric	34	f	5.29	7.14	a
6/14	.2	Southern Utah Power	13	N	7.70	7.81	—
6/16	8.3	Connecticut L. & P.	14	f	6.43	8.13	—
		Common Stocks—Offered to Public					
6/11	.2	Southern Nevada Power	11.50	N	6.96	10.00	a

a—Reported well received. b—Reported fairly well received. c—Reported issue sold somewhat slowly. d—Reported issue sold slowly. e—Offered to stockholders and 51 per cent subscribed but issue later sold at premium. f—Not underwritten but soliciting dealers receive compensation. g—Not underwritten.

JUNE NEW MONEY FINANCING

(In Millions)

	Offered to Stockholders	Sold to Public	Sold Privately	Total Financing
Electric Companies				
Bonds	—	$ 42	$14	$ 56
Preferred Stock	—	47	1	48
Common Stock	$41	—	—	41
Total	$41	$ 89	$15	$145
Gas Companies				
Bonds	—	$117	$38	$155
Preferred Stock	—	1	—	1
Common Stock	$ 2	—	—	2
Total	$ 2	$118	$38	$158
Total Electric and Gas	$43	$207	$53	$303

Refunding operations of electric utilities included $35,000,000 bonds and $21,000,000 preferred stock; there was no refunding by gas companies.

Source: Irving Trust Company.

Why Is it Important to a Public Utility?" In this it was pointed out that "fair value is a judgment figure which takes into account all the factors including, principally, original cost depreciated, reproduction cost less depreciation, and economic trends."

The company made a comparison of its plant with a home which had been bought some ten or twelve years ago at a cost of $8,000 and is now worth $12,000 in the market; with a mortgage of $3,000 the owner's equity would have increased from $5,000 to $9,000. Allowing for depreciation of $2,000, net original cost would now be $6,000; and assuming that reproduction cost is $16,000 less depreciation of $4,000, this would explain the market value of $12,000. Giving both figures (net original cost of $6,000 and net reproduction cost or market value of $12,000) equal weight, the result is a fair value of $9,000. The fair value balance sheet of the company is similar.

Speeding Up Atomic Power

ROBERT LEBARON, chairman of the military liaison committee to the Atomic Energy Commission, in a recent interview reported in *U. S. News and World Report,* stated that he felt we could have large-scale production of electricity from atomic energy within five years, if we would double our efforts and spend $200,000,000 on the program (principally the testing of five types of reactors) instead of the $100,000,000 now earmarked. Since only engineering problems are involved, he thinks it is perfectly feasible to shorten the development period. We have enough uranium so that some can be diverted to industrial use, and world reserves are now estimated at roughly 25 times coal reserves and 100 times oil and gas reserves. Within fifty years, he forecasts that conventional coal-fired steam plants may become a rarity.

Discussing the breeder reactor, Mr. LeBaron said:

> The present estimate is that the fuel cost in nuclear power can be projected at about 1.5 mills per kilowatt-hour, and this is roughly comparable to about $7.50 a ton of coal. Now, this is based on the converter principle. If the breeder could be made to operate and convert all of the material on the basis that we are discussing, then the fuel cost would go down approximately one one-hundredth of this 1.5 mills per kilowatt-hour. . . . It's a problem primarily of working out the nuclear physics and the design of heating elements which can carry out this breeder function. . . . My own feeling is that five years from now an investment in a power plant of that type would be less than the investment of a standard power plant that we have today for steam generation.

As an example of the rapid progress now being made, both as to the time schedule and cost of operation, Mr. LeBaron said: "A year ago practically no one would predict a cost below, we will say, 20 mills. Recently the prediction referred to came down to something like 6 to 7 mills, ultimately, with assurance that today you could operate for 11 or 12 mills. I think the Duquesne plant which is now in the process of being built, and will be the first commercial plant, will run somewhere around 11 or 12 mills. . . . Coal generation in that area is probably 60 or 70 per cent of that price."

HE pointed out that our atomic investment now exceeds in size the combined assets of U. S. Steel and duPont (about $5 billion in plant and equipment and $6 billion in inventory and know-

how), and that perhaps one million people, military and civilian, are working on various phases of atomic energy.

In reply to the interviewer's query, he pointed out that there wouldn't be any substantial change in the cost of power for residential use. The benefits would be mainly in more flexible use of power for industrial purposes—locating industrial operations at the site of raw materials. Industry could become much more decentralized with this flexible power supply.

LIST OF NEW YORK BROKERS' UTILITY ANALYSES*

Company Analyses	*Firm*	*No. Pages*	*Issued*
Arizona Public Service	Kerr & Co.	4	May
Baltimore Transit Pfd.	Herbert E. Stern & Co.	2	May
Central Illinois Pub. Serv.	Paine, Webber, Jackson & Curtis	2	June
Central Indiana Gas	Link, Gorman, Peck & Co. (Chicago)	2	March
Central Vermont P. S.	Josephthal & Co.	2	May
Cincinnati Gas & Electric	Paine, Webber, Jackson & Curtis	2	March
Cincinnati Gas & Electric	Argus Research Corporation	4	May
Columbia Gas System	Josephthal & Co.	4	April
Commonwealth Edison	Argus Research Corporation	2	May
Consolidated Natural Gas	L. F. Rothschild & Co.	—	June
Consolidated Natural Gas	Argus Research Corporation	—	June
Consumers Power	Kerr & Co.	4	April
Empire District Electric	Sutro & Co.	1	April
Florida Power & Light	Paine, Webber, Jackson & Curtis	2	April
General Telephone	Argus Research Corporation	2	June
Idaho Power	Paine, Webber, Jackson & Curtis	2	May
International Tel. & Tel.	J. R. Williston & Co.	1	May
Iowa Public Service	Paine, Webber, Jackson & Curtis	2	March
Iowa Public Service	Josephthal & Co.	2	March
Iowa Southern Utilities	G. A. Saxton & Co.	4	March
Long Island Lighting	Argus Research Corporation	2	March
Madison Gas & Electric	Paine, Webber, Jackson & Curtis	2	May
Middle South Utilities	Paine, Webber, Jackson & Curtis	2	May
Minnesota Power & Light	Bache & Co.	1	March
Minnesota Power & Light	Paine, Webber, Jackson & Curtis	3	June
Niagara Mohawk Power	Argus Research Corporation	2	April
Niagara Mohawk Power	Van Alstyne, Noel & Co.	4	June
Otter Tail Power	Paine, Webber, Jackson & Curtis	2	April
Pacific Gas & Electric	Argus Research Corporation	2	March
Panhandle Eastern Pipe Line	Argus Research Corporation	—	April
San Jose Water Works	Sutro & Co.	3	April
Providence Gas	H. Hentz & Co.	2	April
South Carolina Elec. & Gas	Argus Research Corporation	2	April
Southeastern Public Service	Troster, Singer & Co.	1	March
Southern Company	Paine, Webber, Jackson & Curtis	3	April
Southern Natural Gas	Argus Research Corporation	—	June
Southwestern Public Service	Kerr & Co.	4	March
Standard Gas & Electric	Reynolds & Co.	1	March
Tennessee Gas Transmission	Paine, Webber, Jackson & Curtis	2	June
Texas Utilities	Argus Research Corporation	—	March
Washington Water Power	Argus Research Corporation	2	March
West Penn Electric	Paine, Webber, Jackson & Curtis	2	March
Regular Bulletins and Tabulations			
Monthly Review of Utility Developments	Josephthal & Co.	4	June
Public Utility Common Stocks	G. A. Saxton & Co.	2	June
Public Utilities Bulletin	Eastman, Dillon & Co.	11	June
Electric & Gas Utility Stocks	First Boston Corporation	11	June
General Topics			
Electric Utility Industry	H. Hentz & Co.	4	May

*Similar lists have appeared in the March 18, 1954, issue and in the 1953 issues of November 19th, September 9th, June 4th, and February 26th, also in preceding years.

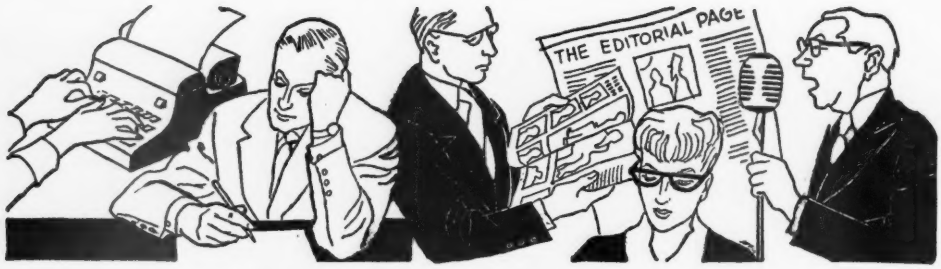
RECENT FINANCIAL DATA ON GAS UTILITY STOCKS

1953 Rev. (Mill.)			6/30/54 Price About	Dividend Rate	Approx. Yield	—Share Earnings*— Current Period	% Increase	12 Mos. Ended	Price-Earns. Ratio	Div. Payout	Moody Bond Rating
		Pipelines									
$ 3	O	Alabama-Tenn. Nat. Gas .	15	$ .60	4.0%	$1.32	1%	Mar.	11.4	45%	—
12	O	East. Tenn. Nat. Gas	9	—	—	.54	26	Mar.	16.7	—	Ba
38	S	Mississippi River Fuel ...	43	2.40	5.6	3.57	12	Mar.	12.0	67	—
48	S	Southern Nat. Gas	30	1.60	5.3	2.10	10	Mar.	14.3	76	A
133	O	Tenn. Gas Trans.	24	1.40	5.8	1.57	28	Mar.	15.3	89	A
137	O	Texas East. Trans.	22	1.00	4.5	1.33	20	Dec.	16.5	75	—
63	O	Texas Gas Trans.	18	1.00#	5.6	1.59	42	Dec.	11.3	63	—
59	O	Transcontinental Gas	23	1.40	6.1	2.00	62	Mar.	11.5	70	—
		Averages			5.3%				13.6		
		Integrated Companies									
118	S	American Natural Gas ..	45	$2.00	4.4%	$3.69	30%	Mar.	12.2	54%	—
232	S	Columbia Gas System ..	14½	.90	6.2	.78	2	Mar.	18.6	115	A
9	A	Consol. Gas Util.	13	.75	5.8	1.14	16	Apr.	11.4	66	—
191	S	Consol. Nat. Gas	61	2.50	4.1	5.00	32	Mar.	12.2	50	Aaa
111	S	El Paso Nat. Gas	41	1.60	3.9	2.94	14	Apr.	13.9	54	—
32	S	Equitable Gas	26	1.40	5.4	1.76	D9	Mar.	14.8	80	A
10	O	Kansas-Neb. Nat. Gas ..	25	1.20	4.8	1.87	14	Dec.	13.4	64	Baa
72	S	Lone Star Gas	26	1.40	5.4	1.83	2	Mar.	14.2	77	—
20	S	Montana-Dakota Utils. ..	21	.90	4.3	1.22	77	Mar.	17.2	74	Baa
14	O	Mountain Fuel Supply ..	22	1.00	4.5	1.37	10	Dec.	16.1	73	A
49	A	National Fuel Gas	19	1.00	5.3	1.42	10	Mar.	13.4	70	Aa
4	O	National Gas & Oil	9	.60	6.7	.98	42	Dec.	9.1	61	Ba
66	S	Northern Nat. Gas	42	2.00	4.8	2.91	21	Mar.	14.4	69	A
32	S	Oklahoma Nat. Gas	22	1.20	5.5	1.26	—	Apr.	17.5	95	—
95	S	Panhandle East. P. L. ..	76	2.50#	3.3	4.93	D1	Dec.	15.4	51	A
8	O	Pennsylvania Gas	18	.80	4.4	.86	D52	Dec.	20.9	93	—
130	S	Peoples Gas Lt. & Coke .	155	6.00	3.9	10.80	19	Mar.	14.4	56	A
23	O	Southern Union Gas	20	.90	4.5	.96	D4	Dec.	20.8	94	A
209	S	United Gas Corp.	30	1.25	4.2	2.11	29	Mar.	14.2	59	A
		Averages			4.6%				15.1		
		Retail Distributors									
20	A	Alabama Gas	24	$ .80	3.3%	$1.67	4%	Mar.	14.4	48%	Baa
32	O	Atlanta Gas Light	23	1.20	5.2	1.78	D6	Mar.	12.9	67	A
4	O	Bridgeport Gas Light ..	25	1.40	5.6	1.78	5	Mar.	14.0	79	—
4	O	Brockton-Taunton Gas ..	10	.40	4.0	.54	23	Dec.	18.5	74	—
46	S	Brooklyn Union Gas	31	1.70	5.5	2.58**	72	Mar.	12.0	66	A
28	O	Central Elec. & Gas	13	.80	6.2	1.10**	13	Mar.	11.8	73	—
2	O	Fall River Gas Works ..	36	1.40	3.9	2.82	248	May	12.8	50	—
44	O	Gas Service	23	1.24	5.4	1.67	NC	Feb.	13.8	74	—
6	O	Hartford Gas	36	2.00	5.6	2.42	17	Dec.	14.9	83	—
1	O	Haverhill Gas Light	39	2.15	5.5	3.07	16	May	12.7	70	—
14	O	Houston Nat. Gas	23	1.00	4.3	2.02	53	July	11.4	50	—
12	O	Indiana Gas & Water	28	1.40	5.0	1.94	9	Dec.	14.4	72	A
5	A	Kings Co. Lighting	14	.80	5.7	1.27	46	Mar.	11.0	63	Baa
33	S	Laclede Gas	11½	.60	5.2	.90	D5	May	12.8	67	Baa
3	O	Michigan Gas Utils.	16	.80	5.0	1.00	56	Dec.	16.0	80	—
27	O	Minneapolis Gas	24	1.20	5.0	1.59	22	Mar.	15.1	75	—
11	O	Mississippi Valley Gas ..	20	1.00	5.0	1.83	D18	Mar.	10.9	55	—
8	O	Mobile Gas Service	18	.90	5.0	1.56	D6	Mar.	11.5	58	—
6	O	New Haven Gas	27	1.60	5.9	1.87	31	Dec.	14.4	86	—
54	O	Northern Illinois Gas ..	19	.80	4.2	.93	NC	Feb.	20.4	86	A
162	S	Pacific Lighting	35	2.00	5.7	1.99	D8	Mar.	17.6	101	—
11	O	Portland Gas & Coke ...	22	.90	4.1	1.87	10	Mar.	11.8	48	Baa
3	A	Rio Grande Valley Gas .	2½	.12	4.8	.22	30	Dec.	11.4	55	—
6	O	Seattle Gas	22	.80	3.6	1.55	48	Mar.	14.2	52	Baa
7	O	South Jersey Gas	21	1.20	5.7	1.41	23	Mar.	14.9	85	Baa
3	O	South Atlantic Gas	12	.70	5.8	.93	37	Dec.	12.9	75	—
5	O	Springfield Gas Light ...	32	1.80	5.6	1.92	D1	Dec.	16.7	94	—
22	S	United Gas Improvement .	36	1.80	5.0	2.26**	D6	Mar.	15.9	80	A
33	S	Washington Gas Light ..	34	1.80	5.3	2.91	22	Mar.	11.7	62	Aaa
3	O	West Ohio Gas	13	.80	6.2	1.01	23	Mar.	12.9	79	—
		Averages			5.1%				13.8		

RECENT FINANCIAL DATA ON TELEPHONE, TRANSIT, AND WATER UTILITIES

1953 Rev. (Mill.)			6/30/54 Price About	Dividend Rate	Approx. Yield	Share Earnings* Current Period	% Increase	12 Mos. Ended	Price-Earns. Ratio	Div. Pay-out	Moody Bond Rating
		Communications Companies									
		Bell System									
$4,417	S	Amer. Tel. & Tel. (Cons.)	167	$9.00	5.4%	$11.66**	2%	Feb.	14.3	77%	Aa
202	A	Bell Tel. of Canada	44	2.00	4.5	2.31	19	Dec.	19.0	87	Baa
34	O	Cin. & Sub. Bell Tel. ..	75	4.50	6.0	5.45	18	Dec.	13.8	83	—
144	A	Mountain States T. & T. .	115	6.60	5.7	7.28	5	Mar.	15.8	91	Aa
237	A	New England T. & T. ..	123	8.00	6.5	7.78	5	Mar.	15.8	103	Aa
579	S	Pacific Tel. & Tel.	125	7.00	5.6	7.23	6	Dec.	17.3	97	Aa
74	O	So. New England Tel. ..	36	1.80	5.0	1.87	7	Dec.	19.3	96	—
		Averages			5.5%				16.5		
		Independents									
10	O	Calif. Water & Tel.	18	$1.00	5.6%	$1.62	76%	Jan.	11.1	62%	—
11	O	Central Telephone	16	.90	5.6	1.56	25	Mar.	10.3	58	—
2	O	Florida Telephone	14	.80	5.7	.85	D14	Dec.	16.5	94	—
128	S	General Telephone	34	1.60	4.7	2.41	40	Apr.	14.1	66	Ba
5	O	Inter-Mountain Tel.	13	.80	6.2	.93	43	Dec.	14.0	86	—
14	S	Peninsular Tel.	35	1.80	5.1	2.15	NC	Apr.	16.3	84	—
16	O	Rochester Tel.	15	.80	5.3	1.18	D7	Mar.	12.7	68	Aa
2	O	Southeastern Tel.	13	.80	6.1	1.09	21	Dec.	11.9	73	—
7	O	Southwestern Sts. Tel. ..	18	1.00	5.6	1.54	12	Dec.	11.7	65	—
32	O	Telephone Bond & Share	19	1.00	5.3	2.07	—	Dec.	9.2	48	—
15	O	United Utilities	18	1.12	6.2	1.44	64	Dec.	12.5	78	—
195	S	Western Union Tel.	41	3.00	7.3	6.77	243	Dec.	6.1	44	Ba
		Averages			5.7%				12.2		
		Transit Companies									
29	A	Capital Transit	11	$1.60	14.5%	$1.16	4%	Aug.	9.5	138%	Baa
14	O	Cincinnati Transit	4	.75	18.8	.93	D17	Dec.	4.3	81	—
9	O	Dallas Ry. & Terminal ..	9	1.40	15.6	1.83	D21	Dec.	4.9	77	—
245	S	Greyhound Corp.	12	1.00	8.3	1.17	D10	Mar.	10.3	85	—
26	O	Los Angeles Transit	10	1.00	10.0	1.20	4	Dec.	8.3	83	—
30	S	National City Lines	16	1.40	8.7	2.35	26	Dec.	6.8	60	—
73	O	Philadelphia Transit	7	.30	4.3	Deficit	—	Dec.	—	—	Ba
7	O	Rochester Transit	3½	.40	11.4	.57	119	Dec.	6.1	70	—
27	O	St. Louis P.S.A.	12	1.40	11.7	1.22	30	Dec.	9.8	115	—
18	S	Twin City R. T.	15	1.60	10.0	.22	NC	Dec.	—	—	Ba
25	O	United Transit	3	—	—	.73	30	Dec.	4.1	—	—
		Averages			11.3%				7.1		
		Water Companies									
		Holding Companies									
32	S	American Water Works .	10	$ .50	5.0%	$1.08	16%	Mar.	9.3	46%	—
4	O	New York Water Service	66	.80	1.2	1.35	NC	Mar.	—	59	—
		Operating Companies									
3	O	Bridgeport Hydraulic ...	30	$1.60	5.3%	$1.57	D3%	Dec.	19.1	102%	—
11	O	Calif. Water Service ...	37	2.20	5.9	2.73	29	May	13.6	81	A
2	O	Elizabethtown Water ...	113	5.00	4.4	6.65	D4	Dec.	17.0	75	—
7	S	Hackensack Water	40	2.00	5.0	3.53	46	Dec.	11.3	57	Aa
4	O	Jamaica Water Supply ..	32	1.80	5.6	2.73	D7	Mar.	11.7	66	A
3	O	New Haven Water	60	3.00	5.0	2.50	D10	Dec.	24.0	120	—
1	O	Ohio Water Service	23	1.50	6.5	1.87	6	Mar.	12.3	80	—
6	O	Phila. & Sub. Water	44	1.00	2.3	5.50	23	Dec.	8.0	18	—
2	O	Plainfield Union Water .	55	3.00	5.5	3.70	D7	Dec.	14.9	81	—
2	O	San Jose Water	38	2.00	5.3	1.75	D16	Apr.	21.7	114	—
9	O	Scranton-Springbrook ...	16	.90	5.6	1.35	25	Mar.	11.9	67	A
3	O	Southern Calif. Water ..	12	.65	5.4	.92	28	Mar.	13.0	71	A
3	O	West Va. Water Service	40	1.40	3.5	1.55**	24	Mar.	—	90	—
		Averages			5.0%				14.9		

A—American Stock Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. D—Decrease. *Earnings are calculated on present number of shares outstanding, except as otherwise indicated. **On average shares outstanding. #—Includes stock dividend. NC—Not comparable.



What Others Think

A Review of Cost-of-capital Return

OVERSHADOWED by the U. S. Supreme Court decision on the same day as the celebrated Phillips Petroleum Case was an obscure procedural action of the court in the Northern Natural Gas Case. The court simply refused to reconsider its action earlier in the term, denying a review of the decision of the eighth U. S. circuit court of appeals handed down a year ago, 1 PUR3d 310. This means that the Federal Power Commission must now take a second look at its application of the cost-of-money theory to the rate of return of the Northern Natural Gas Case—in the light of Chief Justice Woodrough's critical comments about the return allowance in that case.

Inasmuch as the Federal Power Commission decision in the Northern Natural Gas Case (1952) 95 PUR NS 143, 289, is regarded by some observers as a sort of high-water mark in the strict application of the cost of capital in determining the rate of return, what the FPC may decide in its reconsideration of this case should be of interest to all students of utility rate regulation. If one probes beneath the surface of the FPC decision in Northern Natural (and in Colorado Interstate, decided about the same time), it would appear that the FPC was almost on the point of doing away with a physical rate base altogether, and substituting the cost of capital directly on the capitalization base, without much regard to cost of plant at all.

True, there was a mathematical relationship worked out between cost of capital on the capital base and a return percentage on the net investment. But it did not appear to be a very decisive factor in the FPC's opinion. Had that trend continued, generally, regulation might have been in for some hard times. Experience has shown that rate fixing without a physical rate base, whether it be on cost or value, is like a ship adrift on uncharted seas. Since then, however, the FPC—in its more recent cases—has been backing away from exclusive reliance on cost of capital and re-emphasizing its traditional cost of physical rate base.

BUT it is only being realistic to assume that cost of capital will continue in the future, as it has in the past, to play a very important part in the determination of the return allowance. It is for this reason that those interested in the trial of utility rate cases will want to examine carefully two very able analyses of the cost-of-capital techniques which have appeared in the successive (quarterly) issues of *Land Economics,* February and May, 1954, respectively.

In the February issue, Professor E. W.

Clemens of the University of Maryland discusses "Some Aspects of the Rate-of-return Problem." In the May issue, Professor Lionel W. Thatcher of the University of Wisconsin entitles his article "Cost-of-capital Techniques Employed in Determining the Rate of Return for Public Utilities."

Both Clemens and Thatcher cover about the same ground and their analyses of cost of capital as a predominate, if not the exclusive, test of reasonableness for the return allowance are quite sympathetic and (especially in the case of Thatcher's) pretty well weighted in favor of the utility consumer's viewpoint. And since both of these authors have been among the more effective expert witnesses in utility rate cases, representatives on the utility company side of such cases would do well to examine their arguments carefully.

Of course, there is little argument these days about the propriety or usefulness of the cost-of-capital test in determining the rate of return. Criticism has been mainly directed to overemphasis or misapplication of the cost-of-capital theory in recent years. There has also been the complaint that commissions have applied the formula too mechanically without recognition of its limitations.

As most readers of this publication are well aware, the cost-of-capital theory is essentially a determination of the composite cost of the components of a utility's capitalization—debt, preferred stock, and common stock. Most of the controversy is centered in the treatment of common stock capital costs. The theory, as Professor Clemens succinctly states, "boldly assumes that the relevant cost of equity capital is measured by earnings-price and dividends-price ratios or, in other words, by the rates at which earnings and dividends are capitalized in current stock markets."

Clemens divides his discussion into three problems: (1) proper use of earnings-price and dividends-price ratios; (2) proper capital structure; and (3) inflation. Under the first heading he discusses such questions as (a) whether proper data can be drawn from the common stock of the utility involved, or some representative group of securities; (b) the impact of varying credit standings; (c) the varying incentives for investment (*i.e.*, dividends, security, or growth); and (d) variations in pay-out policy on dividends.

Although no estimate of cost of equity capital can be obtained without assuming some pay-out ratio, Clemens puts his finger on one striking point, however, in this connection:

> The calculated pay-out ratios are somewhat misleading for they conceal a considerable amount of "attrition" that takes place in the surplus accounts. Thus for the period 1938-51 the electric utility industry earned $1,815,400 more than it paid out in dividends, yet the surplus account of the industry increased only $744,200,000. The disparity indicates that the industry charged to surplus amounts of more than a billion dollars over and above dividend payments during the period. . . .

Some of this disparity mentioned was due to the adjustment of "write-ups," which reached its peak in 1945 (now pretty well worked out), unamortized bond discount and expense, refunding, etc.

Under the subject of "capital structure," Clements feels that there is an optimum debt ratio and that there is even regulatory responsibility to establish the same where utility companies persist in being unduly conservative about keeping the debt ratio low (as in the case of Bell telephone companies insisting on one-third debt ratio). He suggests, at least in the

case of electric utilities, averaging the debt structure for the industry.

On the topic of inflation, Clemens is quite critical of any effort to enhance the return allowance on the assumption that the integrity of the original investment has been compromised through the deterioration of the dollar. Most of his discussion on this point is a critique of the interesting theory advanced by Professor Walter A. Morton in the May, 1952, issue of *Land Economics*. (Morton proposed to adjust the return on common equity upward by the use of a general price level index of 1946 as the base year; this is to offset inflation.)

CLEMENS suggests, by way of criticism, that "the risks of inflation are only some of the many risks involved in capital commitment for which there is no compensation after the event." Despite regulatory curbs, he would apply a doctrine of *caveat emptor* to utility investors who find themselves at the short end of the deal (compared with other types of investment) as a result of inflation. In fact, he makes an oblique reference to the possibility that all types of capital investment may be doomed to shrinking opportunities and earnings in the following interesting final paragraph of his article:

> . . . The tremendous volume of savings now being made and hardly mopped up by a rapidly expanding economy presages almost inevitably the day when investment will fall short of saving. A decline in corporate earnings is much more to be anticipated than a fall in prices. The Keynesians may be getting their low interest rates in a manner different from the way they expected. It may become the primary objective of capital owners to reduce their real losses to a minimum, and it may be Jobian comfort to investors in utility securities and government bonds to realize that they have found that way. . . .

PROFESSOR Thatcher's article deals mainly with the question of whether the so-called cost-of-capital return can be adjudged as fair and reasonable without an upward adjustment for inflation. Like Clemens, he apparently thinks that it can. He defines cost of capital as an amount adequate for a utility to (1) maintain the market price of common stock at a reasonable level above its book value; (2) permit the accumulation of a sound surplus account after payment of reasonable dividends on common stock; and (3) permit the company to maintain a proper capital structure, with common stock constituting such a per cent of total capital as will give reasonable protection to the various capital components and yet maintain adequate borrowing power.

In addition, of course, the very attraction of capital would be related to whatever rate of return an investor would anticipate from alternative investments of comparable risks. Professor Thatcher separately analyzes the cost-of-capital theory with respect to debt capital and common stock capital.

Regarding the latter and more controversial phase, he makes the point: "The market price of stock . . . reflects the sum total of all investors' expectations and evaluations." Hence Thatcher concludes that an analyst cannot rely on any current dividend rate, with or without allowance for surplus earnings, as a direct measure of the cost of equity capital. He must estimate current cost of equity capital on the basis of probable future changes in earnings and dividend payments, due either to economic conditions or regulatory action. He is inclined to the belief that investors buy utility stocks largely on the basis of dividends rather than earnings.

LIKE Clemens, Thatcher does not think the evidence in rate cases justifies a conservative debt-stock ratio, such as the Bell system's predilection for one-third debt ratio. Nor does Thatcher look with favor on conservative dividend pay-out policies. He states on this point:

> . . . surplus accumulation or "ploughed-back profits" are a source of capital secured by a company without cost of financing. Since it is believed investors are buying stocks on the basis of dividends, is it not more economical to maintain a policy of higher pay-out ratios and raise capital through the issuance of new stock at higher prices rather than through reinvestment of earning? A high pay-out ratio of dividends is currently believed to minimize the over-all cost of capital.
>
> From that viewpoint then the retention of earnings would seem to be needed only to the extent deemed proper for "rainy" days and to stabilize dividends. A review of the security markets from 1947 to date certainly indicates the ability of the public utility industry to attract capital amounting to approximately 50 per cent of the total annual volume of corporate financing. Hence the market has, with a high degree of consistency, tended to place higher values on public utility earnings paid out regularly in dividends than on earnings retained for credit to surplus account. However, there is a segment of the market which is not inclined toward the heavy discounts on retained earnings—a group that is anticipating a gradual increase in the value of their stock holdings. To attract investors of this character (who invest for capital gains) might in the long run require a larger retention of earnings than that necessary to tide over the poor years and to stabilize dividends.

To this reviewer the most challenging part of Dr. Thatcher's article is his suggestion that the impact of inflation, whether over the long range or short range, has been overemphasized. Even if we were to assume the long-run theory of inflation, Thatcher says, the job of the regulatory commission is to fix rates from one to two years in the future, not over a long period.

There is presented in Thatcher's article a wholesale price trend chart, going back to 1801 through 1950. This is based on a 1926 index, and persuades Professor Thatcher to the view that price rises and dips are cyclical rather than generally upward over the long run and are more influenced by wars (1814, 1865, 1920, and 1950) than by any long-run influence of inflation. This reviewer would be interested to know how Thatcher would be able to explain the general deterioration of monetary units over the long run of all nations since the Roman denarius. Thatcher's optimistic analysis of the long-range price trends leaves the reader with the impression that we may yet live to see return of the 5-cent cigar and nickel beer. While it is undoubtedly true that mass production economies over stable periods tend to overtake the gradual rise in unit cost of production, Thatcher's bland assumption about the possible return of lower prices in the face of built-in increased costs, including taxes, of modern operations is difficult to take seriously.

ANOTHER critical reaction of this reviewer to both the Clemens and Thatcher articles is the cavalier if not cynical treatment given to demands that utility investors are entitled to protection of the integrity of their investments from unfair results of inflation. They suggest that fair treatment is something that apparently should be scrupulously considered only

with respect to the consumer. People who bought utility stocks, according to this view, did so with their eyes opened and are not entitled to protection from errors of judgment or changing economic fortunes or trends. This attitude recalls the statement recently made by Justice Minton in the majority opinion in the celebrated Phillips Petroleum Company decision that protection of the consumers was the primary objective of the Natural Gas Act (the inference being that the investors can look out for themselves).

A MORE thoughtful statement about regulatory responsibility, it seems to this writer, was that given by Chairman Kuykendall of the Federal Power Commission to the effect that the regulator is not merely a referee between buyer and seller, but one whose duty it is to "find and maintain the balance which is required" to serve the over-all public interest.

While it is true that utilities have been able to raise enormous quantities of capital under prevailing regulatory restrictions, especially during the postwar expansion period, it does not follow that the threat of a "flight of capital" is a myth to be laughed out of court simply because it has never happened. The transit industry cannot attract a large amount of capital today at favorable cost because of competitive differences beyond conventional regulatory control.

THE situation of public utilities in foreign countries, notably Latin America, is perhaps a better example of failure to attract private capital because of governmental policies and restrictions (including expropriations) which have made the game not worth a candle for the foreign investor. And since there is little domestic private investment available in those countries, direct government operation by default is the obvious trend and almost inevitable result. That could happen here if, over a long enough range, absolute refusal of regulatory authority to allow the utility investors, in some degree, some offset for inflation were to persist. The "flight of capital," if and when it comes (and it *has* happened before), is not something that arrives suddenly, or overnight. But it is a process, which is not easily reversed.

—F. X. W.

Notes on Professional Reviews

"THE HOPE CASE AND PUBLIC UTILITY VALUATION IN THE STATES," by Professor Joseph R. Rose, of the University of Pennsylvania, 54 *Columbia Law Review* 188 (February, 1954).

Professor Rose has made a study of state commission rate case practice since the Hope Natural Gas decision in 1944. He found that out of 43 states included in his survey, four use original cost or prudent investment as the rate base, and did so prior to 1944; nine follow fair value, "according to its traditional meaning"; eight have accepted original cost as a measure of fair value; and 19 have explicitly changed from fair value to original cost or prudent investment. And so he concludes that "of all the predictions commonly made at the time of the (Hope) decision, the one anticipating the decline or reproduction cost and fair value in rate making has proved most accurate." The validity of Professor Rose's assumption is somewhat compromised by the fact that his survey does not apparently reflect some of the more recent highest state court decisions in utility rate cases. During the past eighteen months, there have been a half-dozen state court decisions requiring regulatory commissions to give explicit weight to reproduction or replacement value: Maine, Maryland, Illinois,

North Carolina, Colorado, and Delaware. In four of these cases, the courts required an actual shift away from previous cost bases used by the commission. There may be more before the present year is out.

"NIAGARA *v.* FPC: HAVE PRIVATE WATER RIGHTS BEEN DESTROYED BY THE FEDERAL POWER ACT?" by Charles P. Schwartz, Jr., teaching fellow, Harvard Law School, 102 *University of Pennsylvania Law Review* 31 (November, 1953).

Since this article was written, the U. S. Supreme Court, in its 4-to-3 decision last March, affirmed the District of Columbia court of appeals opinion to the effect that the Federal Power Act does not wipe out existing state authority rights in navigable streams. Mr. Schwartz's analysis of ruling case law proved to be, on the whole, quite prophetic in the light of the subsequent majority opinion by Justice Burton.

"INDEPENDENT REVIEW OF ADMINISTRATIVE AGENCY DETERMINATIONS IN THE STATES: THE VITALITY OF THE BEN AVON RULE," note in 102 *University of Pennsylvania Law Review* 108 (November, 1953).

Back in 1950 Professor Davis, writing in the *California Law Review,* made the statement that "the long debate about the *de novo* review *versus* restrictive review is about ended; the celebrated Ben Avon Case (which assured independent judicial review of regulatory orders claimed to be confiscatory) is of little interest except as history. . . ." This prediction has turned out to be somewhat premature, to say the least. The *Pennsylvania Law Review* note on subsequent case law makes it very clear that the state courts have their own ideas about judicial review of orders of administrative agencies. The author of this note suggests that even a U. S. Supreme Court decision, affirming or overruling Ben Avon, would not be the final answer. State courts are going to do as they please about maintaining the balance between judicial review and administrative expertise.

"EMPLOYEE PROTECTION AND THE REGULATION OF PUBLIC UTILITIES: MERGERS, CONSOLIDATIONS, AND ABANDONMENT OF FACILITIES IN THE TRANSPORTATION INDUSTRY," by Allison W. Brown, Jr., member of the District of Columbia Bar, 63 *The Yale Law Journal* 445 (February, 1954).

Granted that regulation of public utilities must include authority to control consolidations and abandonment, this author raises some interesting questions about the rights of labor unions to seek protection of jobs and job opportunities. After reviewing labor union demands in the case of railroads and commercial airline regulation, he states: "one might expect further labor efforts to have both federal and state agencies extend the protection doctrine to other areas of utility regulation. State regulatory bodies, in particular, can anticipate continued union efforts to gain more widespread recognition of the principle."

"LEGAL RESTRICTION OF COMPETITION IN THE REGULATED INDUSTRIES: AN ABDICATION OF JUDICIAL RESPONSIBILITY," by Professor Louis B. Schwartz, University of Pennsylvania Law School, 67 *Harvard Law Review* 436 (January, 1954).

"THE CASE FOR WIRE TAPPING," by William P. Rogers, Deputy Attorney General of the United States, 63 *The Yale Law Journal* 792 (April, 1954).

"WE will accept nothing over and above freedom. And as long as we live that—and believe in it—and do our work in that spirit, to my mind, America is not only safe but America is going forward in the expanding and growing economy that will bring greater and greater happiness to our people, security for us, and promote peace in the world."

—DWIGHT D. EISENHOWER,
President of the United States.

The March of Events

No Ferguson Bill

SENATOR Ferguson (Republican, Michigan) was the one to request "indefinite postponement" of hearings on his own measure (S 3178), thereby virtually killing its chances of enactment for the session. A companion bill in the House by Representative Oakman (Republican, Michigan) shared the same fate. Ferguson's bill would have required the FPC to use an original cost basis in valuing gas producing facilities for rate making.

Ferguson explained his motion for postponement on grounds that it needed "considerably more study in the light of the (Phillips) decision." He referred to the recent U. S. Supreme Court decision holding independent gas producers such as the Phillips Petroleum Company to be subject to the Natural Gas Act. Ferguson's motion was concurred in by James H. Lee, assistant corporation counsel for the city of Detroit, who was to appear before the Senate committee to testify on S 3178 in his official capacity and as a representative of the National Institute of Municipal Law Officers. Lee took the position that the Ferguson-Oakman Bill was proper and timely when introduced, but that the Phillips decision had changed the situation.

FPC Chairman Kuykendall said that the commission will not disclose its plans for carrying out the order of the Phillips decision until the FPC receives the court's mandate some time this month. But he added that the FPC will, at that time, regard the jurisdiction question as finally settled, regardless of pending motions for rehearings, unless the court grants a stay (considered very unlikely).

Colorado

Gas Rate Reduction Urged

PETITIONS urging an immediate $363,000 reduction in natural gas rates of the Public Service Company of Colorado and a further $502,000 reduction next year were filed with the state public utilities commission late last month by the Colorado Municipal League and by Mayor Newton for the city of Denver.

Calling for a cutback in the $1,748,000 emergency gas rate increase approved earlier this year for the company, the petitions contended that testimony by Public Service Company experts in the current $4,000,000 electric rate increase case showed the emergency retail gas price boost was much higher than actual wholesale increases to the company.

District of Columbia

Automatic Adjustment Allowed

THE Washington Gas Light Company recently was empowered to adjust its retail gas charges automatically whenever its wholesale rates either increase or decrease in excess of $100,000 annually.

Acting on another formal request aired at public hearings last month, the District of Columbia Public Utilities Commission also authorized the gas company to distribute $474,149 in refunds to District consumers. These refunds stem from retroactively lowered wholesale rates charged the gas company by its wholesaler, Atlantic Seaboard Corporation, for the period May 29, 1953, through last February 28th.

A second refund totaling $257,000 for the period March 1 to November 1, 1954, will be lumped with the first refund and credited to local retail bills, effective August 1st. This second refund is to be the company's first exercise of its automatic retail rate adjustment privilege.

Illinois

Gas Rate Reduction Ordered

AN 11 per cent reduction in gas rates of the Central Illinois Light Company was ordered recently by the state commerce commission. The cut will total $1,203,776 annually and restore rates to about the level of 1952. That was prior to increases granted the distributing utility after its supplier, Panhandle Eastern Pipe Line Company, raised its wholesale prices.

Main beneficiaries of the reduction will be the company's 45,000 residential and commercial space-heating customers, the commission said.

The reduction was the third made by utilities serving the central part of the state since Commission Chairman George R. Perrine advised them to reduce their local rates following action of the Federal Power Commission in cutting the wholesale rates of Panhandle Eastern. Total reductions to gas consumers in central Illinois as of late June were reported to be $2,300,000 annually and others were expected.

Missouri

Seeks Gas Rate Rise

AN application for an increase in gas rates in Missouri totaling nearly $4,750,000 was filed recently with the state public service commission by Gas Service Company. The company said it would also seek increases in Kansas and Oklahoma to absorb the increase asked by its wholesaler, Cities Service Gas Company, which would amount to $9,428,083.

If the full Cities Service request is not granted, Gas Service then would reduce its new rates correspondingly, the company said.

The new rates, if approved, will become effective September 23rd. That is the same date the Cities Service increase is scheduled to go into effect. Both domestic and commercial users will be subject to the new Gas Service rates.

The firm serves approximately 500,000 customers in three states.

Pennsylvania

Asks Second Rate Increase

NEW rate scales, the second increase sought by the Equitable Gas Company in recent weeks, were filed last month with the state public utility commission. Bills of the company's 225,000 customers would be increased about $1.20 monthly for a typical heating bill, effective August 26th.

The June 10th increase was needed, according to A. W. Conover, president of Equitable, to cover a rise in the cost of gas from the distributors. This latest increase is for increases in labor, materials, taxes, and other operating costs, Mr. Conover said. To expand and improve the system to meet customer demand for natural gas, he explained, the company has had to sell securities and will have to sell more.

A fair rate of return must be maintained on these securities to assure additional funds for future growth and expansion, Mr. Conover said.

South Dakota

Rate Statute Attacked

CONSTITUTIONALITY of a South Dakota law empowering municipalities to regulate the sale, use, and price of gas and electricity was challenged in a suit filed last month in the federal district court at Sioux Falls by the Central Electric & Gas Company against the Sioux Falls city commission.

Contending that the law is "indefinite, uncertain, and lacks specific standards for use in fixing and determining rates," the company asked that it be adjudged unconstitutional and void, and that an injunction be issued against the Sioux Falls city commission to prevent interference with the collection of rates proposed by the company.

The company also contended in its complaint that further action is needed by the state legislature to establish the procedure for fixing rates of public utilities.

Virginia

Court Denies Writ

THE state supreme court recently rejected a petition for suspension of higher electric rates of the Virginia Electric & Power Company pending a hearing of the case on an appeal awarded to Arlington county. The high state court turned down Arlington's request for a writ of supersedeas, which would have suspended Vepco's rate increase until the case had been decided.

Indications were that the case probably would not be argued before November. Arlington was granted the appeal hearing as a matter of right because the case came from the state corporation commission.

Last December 30th the state commission approved Vepco's request for new rates that would produce about $4,800,000 additional annual gross revenue. However, the county's petition for a writ of supersedeas, accompanying the petition for appeal, was turned down by the court with only a brief entry stating the writ had been denied.

Progress of Regulation

Nonrecurring Expenses and Working Capital Allowance Criticized by Court

THE supreme court of Ohio reversed and remanded to the state commission an order authorizing a telephone rate increase. In doing so, the court held that nonrecurring expenses must be disallowed for rate-making purposes. The commission was held to have improperly allowed such expenses.

Parties appealing claimed that the commission wrongfully allowed a federal excess profits tax as a recurring expense. On the valuation date in this case the company's earnings, under the rates then in effect, did not require it to pay such tax. The tax statute was automatically scheduled to expire by its terms shortly after the valuation date, and after a limited extension, it did actually expire at the end of the year.

It was only through the increase in rates allowed by the commission that the company was required to pay any excess profits tax, and then only for a short period. The court concluded that this was not a recurring expense to be included in the company's expenses for rate-making purposes.

Pension Costs

For many years the company's pensions were handled on a pay-as-you-go basis. Eventually a change was adopted to permit advance collections for pension payments on an actuarial basis. However, the rates adopted at that time did not provide sufficient money for the payment of all pensions that might accrue, since many employees had accumulated service prior to the establishment of the pension fund.

Beginning in 1941, the company made annual "freezing payments" of amounts equivalent to the interest on the unfunded actuarial reserve in order to arrest its growth. About four years later the company began amortizing the "unfunded actuarial reserve" deficiency to extend over a 10-year period. The unfunded actuarial reserve deficiency will completely amortize within two years.

The appellants claimed that the annual payments to freeze the unfunded reserve and to establish a funded "actuarial reserve" for the pension fund were not proper or legal charges to be included in current operating expenses. They said that at best such expenses are nonrecurring, requiring amortization over a 5-year period. The court agreed with these arguments, saying that the annual current payments into the pension fund were properly includable as recurring expenses, but that the "freezing" and amortization payments made to the unfunded actuarial reserve pension fund should be excluded or amortized over a reasonable period.

Working Capital

Customer contributions in the form of accruals for the payment of taxes, deposits to secure the payment of customers' bills for services or as advances on installation charges, and collection for rents to be paid at future dates were said to be constant, with reasonable certainty in the foreseeable future. They were available for investments in materials and supplies, or for use as working capital. The court decided that such amounts should be used as an offset on the allowance for working capital, including investments in materials and supplies necessary for the normal operations of the company and for plant maintenance and repairs. The commission had failed to make this adjustment for working capital.

Materials for Future Construction

The court also held that materials and supplies which will be used for new construction, extensions, and additions, as distinguished from normal company operations and plant maintenance and repair, are not property used and useful for the service and convenience of the public. Consequently, inclusion of the investments in such materials and supplies in the rate base structure of the company was unlawful and unreasonable. *City of Cincinnati v. Public Utilities Commission, 119 NE2d 619.*

Voluntary Telephone Association Is Public Utility

THE Missouri commission decided that a telephone company in the form of an unincorporated, voluntary association was a public utility subject to commission regulation. Shares in the association were owned mainly by the individuals utilizing the service and very few individuals owned more than one such share.

No dividends had ever been paid, and all money received in excess of expenses had been returned to the plant in the form of improvements and extensions. The owners declared their avowed purpose was that the company should earn only enough to keep it in operation and provide service. The company had no intention of earning a profit for the benefit of the holders of the proprietary interest.

The commission noted that the value of the system had increased from time to time. Such value was reflected in the proprietorship of the various owners. Also, there was no rule or regulation, or agreement of the company or its owners, which prevented a profit from being earned and distributed. The company was directed to submit a rate schedule for commission approval.

Dual Service to School

The commission also resolved a dispute between the company and another telephone company, which served an adjacent area, with respect to the rendering of telephone service to a community school. Both companies, held the court, should provide service to the school. The commission stated its reasons for this decision in these words:

> We recognize that in the ordinary situation it is not good utility regulation for one utility to be permitted to invade the service territory of another utility; that in the usual case a company authorized to furnish service in a given area should be permitted to do so to the exclusion of the others. However, in this instance, we have an unusual situation. Telephone service furnished a school at-

tended by many children provides a convenience and means of communication largely for the parents and the students themselves. In the instant case, more than one-half of the students live in the territory served by the Laddonia Company. Even if the service through the Martinsburg exchange of the F & M Company were furnished at no cost to the persons living in the Laddonia Company's service area, we believe that a more satisfactory arrangement will result if service is supplied directly through the exchange in Laddonia. Therefore, because of the nature of the use being made of the telephone service and the unusual situation with respect to the location of the school district to the two telephone companies, we shall authorize the Laddonia Telephone Company to provide exchange service to the school at Scott's Corner. At the same time, it is our opinion and we find that the F & M Company should also provide telephone service to the school for the benefit of persons residing in its exchange area.

Re Laddonia Rural Teleph. Co. Case No. 12,695, April 12, 1954.

Airport's Common Use Facilities Held Subject To Commission Regulation

A MUNICIPAL commission which was also the business operator of an airport entered into a lease agreement with an airline company to furnish land and facilities for a stated period at certain rates. Later, the same commission, acting as a rate-making body, prescribed rates which airlines were to pay for using the airport. These rates were higher than the rates fixed in the contract.

The airline company refused to pay the higher rates, insisting that the limits of its liability were the charges fixed by the lease.

After the airline had been informed that it would be deprived of certain facilities unless it paid, an action for declaratory relief was brought before the United States district court. The company also sought to enjoin the city from depriving it of the common use facilities.

The city admitted that those properties not used in common were controlled by the lease. However, it was contended that the rates applicable to landings, take-offs, and other common use facilities could be regulated by the commission since it was a public utility service.

The factor which determines whether an agency is a public utility, commented the court, is whether all persons in a position to require the services rendered have a right to be supplied such services on equal terms. In this case, the furnishing of common use facilities constituted a public utility service which was subject to commission regulation. The commission, the court held, had the right to fix general rates for the use of the facilities, notwithstanding that it also engaged in the function of operating the utility.

Commenting on the airline's contention that it would be unfair to declare the lease inoperative, the court said:

> The reason put forth is that plaintiff would not have entered into a lease of hangar space without having fixed with the city in advance the charges as to the common use facilities. This argument is without merit. If it were not, a manufacturer might well argue that he would not have leased a factory for twenty

years except for the fact that he was able to fix by contract the price of his electricity and water for the same period. Clearly if a contract had been entered into for these utility services at a fixed rate, subsequent regulation by the proper body would affect the charges agreed upon.

The court concluded that, with reference to the common use facilities, the commission schedule applicable to all the airlines must be applied to the lease agreement. *Trans World Airlines, Inc. v. City and County of San Francisco et al. 119 F Supp 516.*

State Commission Lacks Jurisdiction over Railroad's Segregation Practices

A PASSENGER claimed that a railroad's practice of segregating passengers on the basis of race or color constituted unreasonable discrimination. After the Illinois commission had directed the railroad to cease and desist such practices, the company appealed to the Illinois supreme court.

The Interstate Commerce Commission, held the court, has primary and exclusive jurisdiction over cases dealing with the reasonableness of an interstate railroad's discrimination with respect to practices and rates. The fact that this case involved a passenger, and not a shipper, does not change the rule. The court pointed out the dangers which would result from a contrary holding:

> If the state of Illinois could prescribe what rule or practice should or should not be followed by an interstate carrier in loading interstate passengers on interstate trains, then so, too, could the states of Kentucky, Tennessee, Mississippi, and Louisiana through which the Illinois Central operates its train "The City of New Orleans." Under the laws of each of those other states, the Illinois Central is required to provide separate but equal accommodations for the Negro and Caucasian races. The chaotic conditions that would result from divergent loading practices prescribed by various states clearly indicates that the interstate and intrastate characteristics of loading are so interrelated that the paramount federal power must be exerted to the exclusion of the state powers in order to achieve a single, uniform rule for the promotion and protection of national travel.

The state commission's order was reversed. *Illinois C.R.Co. v. Illinois Commerce Commission, 118 NE2d 435.*

State Supreme Court Affirms Order Restraining Township From Barring Utility Construction

THE Pennsylvania supreme court affirmed a lower court order restraining a township from using zoning law restrictions to bar construction of an electric transmission line. The court of common pleas, in a proceeding reported in (1954) 3 PUR3d 44, had enjoined the township and its officers from imposing substantial penalties on an electric company which had commenced the construction after the public utilities commission had approved the site of the line but prior to any approval of the township's zoning board.

The facts are stated in the lower court opinion in this way: The electric company desired to construct a transmission line across the township to deliver energy to another area which badly needed additional power. None of the energy carried by the new line would be used in the township. The public utilities commission approved the site of the line. The company purchased the land and commenced construction. The township's police officer then served a notice requiring that the work be stopped until a building permit was obtained and further stating that a fine of $100 per day would be imposed for each day that the work was continued or construction maintained without a permit. The suit in the lower court followed.

The supreme court quoted the lower court decision with approval. The legal questions decided by the court can be stated very briefly. First, a first-class township may not regulate a public utility by zoning ordinance since the legislature has committed the regulation of utilities to the public utility commission; second, a court of equity has jurisdiction over a proceeding of this type brought by a utility where the town is threatening to collect substantial cumulative penalties for each day that construction was continued and is impeding the progress of necessary construction and thus causing irreparable harm to the utility. *Duquesne Light Co. v. Township of Upper St. Clair, Nos. 171, 173, May 24, 1954.*

Court Rules against Exclusive Franchise Claim Of Co-operative

THE Montana supreme court affirmed a lower court's dismissal of a proceeding brought by an electric co-operative to restrain an electric company from constructing a distribution line in territory served by the co-operative. No contention was made that any physical interference with the co-op's poles, lines, or equipment had taken place. The co-op's case was simply that it had "an implied exclusive franchise right" to sell electric energy in the area and that the company's invasion of its territory was unlawful competition.

The court carefully considered statutes bearing on the issue and, in denying the co-operative's claim, made this statement:

> Had our lawmakers intended that co-operatives should have the exclusive right to furnish electric energy in such rural areas, and thus prevent competition by other authorized electric public utility, they should have used clear and apt words to so declare. Certainly, no such far-reaching right can be left to implication or inference.

Sheridan County Electric Co-op. v. Montana-Dakota Util. Co. 270 P2d 742.

Restricted Surplus Resulting from Rapid Amortization Considered As Capital Equity

THE Florida commission approved accounting procedures for an electric utility which had received emergency certificates from the Internal Revenue Bureau. In spite of the fact that for tax purposes the company could depreciate emergency facilities over a 5-year period, the commission required the company to

maintain its books of account so that depreciation would be taken at rates consistent with those for like property not covered by emergency certificates.

Tax Savings

The company was directed to charge to "Provision for Deferred Income Taxes" and credit to "Earned Surplus Restricted" the tax savings brought about by the fast tax write-off. The ultimate disposition of the balance in the restricted surplus account was left to further order of the commission.

Capitalization Ratios

A related matter considered by the commission concerned a charter restriction on the company's paying common stock dividends when its common stock equity was less than 25 per cent of total capitalization.

With a view toward providing the company with a more receptive market in which to sell securities, the commission permitted the restricted surplus to be included as capital equity in the determination of capitalization ratios. However, the company was expressly prohibited from using any of the restricted surplus for the payment of dividends. *Re Florida Power & Light Co. Docket No. 4079-EU, Order No. 2025, June 7, 1954.*

Limit on Consideration of Parent Company's Operation

THE Nebraska commission did not consider projected figures offered by a telephone company in support of a rate increase application. One projection was an estimate of the book cost of plant and equipment, materials and supplies, working capital, and depreciation reserve to the end of the calendar year 1954. Another consisted of an estimate of the replacement cost of the company's property, working capital, materials and supplies, less depreciation reserve, to the end of the year. The commission made the following comment on these figures:

> If the projected figures were included in a rate base used as a basis for the computation of a fair return to applicant, it would in effect be requiring the ratepayers to pay through telephone rates a return to the company upon some property in which no investment has been made by the company.

Parent Company's Finances

Counsel for parties objecting to the rate increase inquired about the net earnings of the company's parent, American Telephone and Telegraph Company, and the dividends paid on the parent company's stock.

The commission observed that it had no jurisdiction over the rates, service, or earnings of the parent and that testimony concerning the parent's finances would be considered only as it related to the operating results of the applicant's intrastate business.

Finally, the commission approved a 10-cent charge for local pay-station calls and allowed other rate increases so that the company's return on various rate bases submitted would range between 4.44 per cent and 6.27 per cent. *Re Northwestern Bell Teleph. Co. Application No. 19599, June 10, 1954.*

Other Important Rulings

Refund Directed. A water company was directed by the New York commission to refund to metered customers an amount equivalent to 5 per cent of the revenues

for a past period, in a manner which would entail as little cost and expense as possible, where the evidence showed that the rates had been too high and that the refund would still leave the company a reasonable return. *Re Citizens Water-Supply Co. of Newtown, Case 15382, May 4, 1954.*

Power Cost Limited. An electric utility was authorized by the Wisconsin commission to install additional generating facilities, with the understanding that any cost in excess of the cost of power offered the utility by a co-operative under a wholesale contract would not be taken into account in fixing rates, where the co-operative was not under commission jurisdiction and could not have been prevented from discontinuing service to the utility at the end of the proposed contract period. *Re City of Barron, CA-3223, May 27, 1954.*

Overhead Allowance. The Missouri commission, in refusing to make any allowance for general overheads in a telephone rate base, noted that in the absence of evidence that overheads were capitalized, it must be assumed that they were not capitalized. *Missouri Pub. Service Commission v. Purdy Teleph. Co. Case No. 12,762, May 25, 1954.*

Municipal Water Rates Increased. A municipal water utility was authorized by the Wyoming commission to increase rates to the point where operating revenues were sufficient to keep the line in repair and enable the utility to provide adequate service, where the only other statutory method of obtaining the necessary funds was from the sale of bonds and the people of the town had voted down a proposed bond issue. *Re Town of Douglas, Docket No. 9255, May 28, 1954.*

Metered Service Directed. A water company was directed by the Indiana commission to put all its customers on metered service, since to supply a portion of the customers on an unmetered basis usually results in unjust discrimination. *Re Mt. Summit Water Co. No. 24908, April 29, 1954.*

Municipal License Fee. A statute prohibiting municipalities from collecting license or registration fees or taxes on aircraft does not preclude the city from imposing reasonable license requirements on operators of aircraft making flights over the city for the purpose of advertising, held the Florida supreme court, even though a fee is collected therewith. *Tatum v. City of Hallandale et al. 71 So2d 495.*

Airline Purchase Contract. The Civil Aeronautics Board's refusal to approve an airline's contract to purchase an individual's controlling shares of stock in another airline, held the Mississippi supreme court, renders the contract illegal and is a valid defense to a breach of contract suit brought against the airline. *Powelson v. National Airlines, Inc. 71 So2d 467.*

Tax Rebate. The Wisconsin commission, after ordering a refund of overcharges on railroad tank-car shipments of sulphuric acid, ruled that it was without jurisdiction to order a rebate of the excess federal transportation taxes paid on the shipments. *Wisconsin Co-op. Farm Plant Foods v. Chicago, M., St. P. & P. R. Co. 2-R-2743, May 17, 1954.*

No Violation of Due Process. The Missouri commission commented that a railroad was not being deprived of property without due process of law if continued operation of certain trains was required by the commission, where the company's profits from freight service between the

points in question exceeded the operational losses sustained by the passenger trains. *Re Chicago, R.I. & P.R. Co. Case No. 12,449, April 27, 1954.*

Operation at a Loss. The Utah commission commented that a public utility cannot be required to continue operating at a loss for a long period of time unless it can be shown that prospects for a profitable operation are in the future. *Re Salt Lake & Tooele Stage Lines, Case Nos. 261, 825, 1132, 2701, 3122, April 28, 1954.*

Dividend Restriction. The Georgia commission, in authorizing a transit corporation to issue securities and evidences of debt, imposed a condition that dividends be limited to actual earnings after provision for depreciation on a cost basis and for tax liabilities. *Re Atlanta Transit System, Inc. File No. 19568, Docket No. 648-U, May 12, 1954.*

Airport Service. The Civil Aeronautics Board, in disallowing an airline's proposal to serve a certain city through another city's airport, commented that both existing service in the city and the city's need for service were pertinent subjects of inquiry. *Re American Airlines, Inc. Docket No. 6125, E-8370, May 26, 1954.*

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PHILLIPS PETROLEUM CO. v. STATE OF WISCONSIN

UNITED STATES SUPREME COURT

Phillips Petroleum Company

v.

State of Wisconsin et al.

No. 280

State of Texas et al. v. State of Wisconsin et al., No. 281; Federal Power Commission v. State of Wisconsin et al., No. 418

— US —, 98 L ed —, 74 S Ct 794
June 7, 1954

REVIEW *of lower court judgment reversing decision of Federal Power Commission that petroleum company producing and gathering gas and selling it to pipeline companies was not a natural gas company subject to regulation under the Natural Gas Act; affirmed. For lower court decision, see (1953) 92 US App DC 284, 100 PUR NS 506, 205 F2d 706, and for commission decision, see (1951) 10 FPC 246, 90 PUR NS 325. Certiorari had first been denied by the Supreme Court in 74 S Ct 218, 226 and later granted in 346 US 934, 935, 74 S Ct 374–376.*

Gas, § 2.1 — Jurisdiction of Federal Power Commission — Production or gathering.

1. A petroleum company producing, gathering, and processing natural gas from wells which it owns, along with gas which it buys, and selling the gas to pipeline companies for interstate transportation and resale, is not exempted from Federal Power Commission regulation by § 1(b) of the Natural Gas Act, 15 USCA § 717(b), since the sales are not a part of the production or gathering of natural gas or an exempt incident thereof, p. 130.

Gas, § 2.1 — Status under Natural Gas Act — Sales by producer and gatherer.

2. A petroleum company producing, gathering, and processing natural gas and moving the gas through short lines to points where it sells the gas to pipeline companies for interstate transportation and resale, selling the gas after the time and beyond the place at which production and gathering are complete and after processing has intervened, is a "natural-gas company" subject to the jurisdiction of and regulation by the Federal Power Commission under the Natural Gas Act, p. 130.

Gas, § 2.1 — Jurisdiction of Federal Power Commission — Degree of state regulation.

3. The jurisdiction of the Federal Power Commission under the Natural Gas Act does not vary from state to state depending upon the degree of state regulation and of state opposition to federal control, p. 134.

Rates, § 13.4 — Jurisdiction of Federal Power Commission — Sales of natural gas.

4. The Federal Power Commission has jurisdiction over the rates of all wholesales of natural gas in interstate commerce, whether by a pipeline company or not and whether occurring before, during, or after transmission by an interstate pipeline company, p. 134.

Gas, § 2.1 — Jurisdiction of Federal Power Commission — Congressional intent — Court decisions.

5. The gap between federal and state regulation which the Natural Gas Act was intended to fill is that thought to exist at the time the Natural Gas Act was passed, and the jurisdiction of the Federal Power Commission is not affected by subsequent decisions of the Supreme Court, in cases involving state control of field prices, which somewhat loosened the constitutional restrictions on state activities affecting interstate commerce in the absence of conflicting federal regulation, particularly when the Federal Power Commission did not participate in those cases and the court refused to consider whether the Natural Gas Act authorized the commission to set field prices on sales by independent producers or left that function to the states, p. 136.

(FRANKFURTER, J., concurs in separate opinion; CLARK, BURTON, and DOUGLAS, JJ., dissent.)

APPEARANCES: Hugh B. Cox, of Washington, D. C., argued the cause for petitioner in No. 280; Dan Moody, of Austin, Texas, argued the cause for petitioners in No. 281; Solicitor General Sobeloff, of Washington, D. C., argued the cause for petitioner in No. 418; Stewart G. Honeck and William E. Torkelson, both of Madison, Wisconsin, Charles S. Rhyne, of Washington, D. C., Harry G. Slater, of Wilwaukee, Wisconsin, and James H. Lee, argued the cause for respondents.

Mr. Justice MINTON delivered the opinion of the court:

These cases present a common question concerning the jurisdiction of the Federal Power Commission over the rates charged by a natural-gas producer and gatherer in the sale in interstate commerce of such gas for resale. All three cases are an outgrowth of the same proceeding before the Power Commission and involve the same facts and issues.

[1, 2] The Phillips Petroleum Company[1] is a large integrated oil company which also engages in the production, gathering, processing, and sale of natural gas. We are here concerned only with the natural-gas operations. Phillips is known as an "independent" natural-gas producer in that it does not engage in the interstate transmission of gas from the producing fields to consumer markets and is not affiliated with any interstate natural-gas pipeline company. As revealed by the record before us, however, Phillips does sell natural gas to five interstate pipeline transmission companies which transport and resell the gas to consumers and local distributing companies in fourteen states.

Approximately 50 per cent of this gas is produced by Phillips, and the remainder is purchased from other producers. A substantial part is casinghead gas—i.e., produced in connection with the production of oil. The gas flows from the producing

[1] Hereinafter referred to as Phillips.

wells, in most instances at well pressure, through a network of converging pipelines of progressively larger size to one of twelve processing plants, where extractable products and impurities are removed. Of the nine such networks of pipelines involved in these cases, five are located entirely in Texas, one in Oklahoma, one in New Mexico, and two extend into both Texas and Oklahoma. After processing is completed, the gas flows from the processing plant through an outlet pipe, of varying lengths up to a few hundred feet, to a delivery point where the gas is sold and delivered to an interstate pipeline company. The gas then continues its flow through the interstate pipeline system until delivered in other states.

The Federal Power Commission, on October 28, 1948, 7 FPC 983, instituted an investigation to determine whether Phillips is a natural-gas company within the jurisdiction of the commission, and, if so, whether its natural-gas rates are unjust or unreasonable. In extensive hearings before an examiner, the facts described above were developed, as well as much additional information. An intermediate decision having been dispensed with, the commission issued an opinion and order in which it held that Phillips is not a "natural-gas company" within the meaning of that term as used in the Natural Gas Act,[2] and therefore is not within the commission's jurisdiction over rates.[3] Consequently, the commission did not proceed to investigate the reasonableness of the rates charged by Phillips. On appeals, the decision of the commission was reversed by the court of appeals for the District of Columbia, one judge dissenting. 92 US App DC 284, 100 PUR NS 506, 205 F2d 706. We granted certiorari. (1954) 346 US 934, 935, 74 S Ct 374–376.

The Power Commission is authorized by § 4 of the Natural Gas Act, 15 USCA § 717c, to regulate the "rates and charges made, demanded, or received by any natural-gas company for or in connection with the transportation or sale of natural gas subject to the jurisdiction of the commission, ..." "Natural-gas company" is defined by § 2(6) of the act, 15 USCA § 717a (6), to mean "a person engaged in the transportation of natural gas in interstate commerce, or the sale in interstate commerce of such gas for resale." The jurisdiction of the commission is set forth in § 1 (b), 15 USCA § 717(b), as follows:

"The provisions of this act shall apply to the transportation of natural gas in interstate commerce, to the sale in interstate commerce of natural gas for resale for ultimate public consumption for domestic, commercial, industrial, or any other use, and to natural-gas companies engaged in such transportation or sale, but shall not apply to any other transportation or sale of natural gas or to the local distribution of natural gas or to the facilities used for such distribution or to the production or gathering of natural gas."

Petitioners admit that Phillips engages in "the sale in interstate commerce of natural gas for resale," as, of course, they must. Interstate Nat. Gas Co. v. Federal Power Commission

[2] 52 Stat 821, as amended, 15 USCA § 717 et seq.

[3] (1951) 10 FPC 246, 90 PUR NS 325. One commissioner concurred in the decision and one dissented.

(1947) 331 US 682, 687–689, 69 PUR NS 1, 4–6, 91 L ed 1742, 67 S Ct 1482; cf. Michigan-Wisconsin Pipe Line Co. v. Calvert (1954) 347 US 157, 166–168, 74 S Ct 396. They contend, however, that the affirmative grant of jurisdiction over such sales in the first clause of § 1(b) is limited by the negative second clause of the section. In particular, the contention is made that the sales by Phillips are a part of the "production or gathering of natural gas" to which the commission's jurisdiction expressly does not extend.

We do not agree. In our view, the statutory language, the pertinent legislative history, and the past decisions of this court all support the conclusion of the court of appeals that Phillips is a "natural-gas company" within the meaning of that term as defined in the Natural Gas Act, and that its sales in interstate commerce of natural gas for resale are subject to the jurisdiction of and regulation by the Federal Power Commission.

The commission found that Phillips' sales are part of the production and gathering process, or are "at least an exempt incident thereof."[4] This determination appears to have been based primarily on the commission's reading of legislative history and its interpretation of certain decisions of this court. Also, there is some testimony in the record to the effect that the meaning of "gathering" commonly accepted in the natural gas industry comprehends the sales incident to the physical activity of collecting and processing the gas. Petitioners contend that the commission's finding has a reasonable basis in law and is supported by substantial evidence of record and therefore should be accepted by the courts, particularly since the commission has "consistently" interpreted the act as not conferring jurisdiction over companies such as Phillips.[5] See Gray v. Powell (1941) 314 US 402, 86 L ed 301, 62 S Ct 326; National Labor Relations Board v. Hearst Publications (1944) 322 US 111, 88 L ed 1170, 64 S Ct 851. We are of the opinion, however, that the finding is without adequate basis in law, and that production and gathering, in the sense that those terms are used in § 1(b), end before the sales by Phillips occur.

In Federal Power Commission v. Panhandle Eastern Pipe Line Co. (1949) 337 US 498, 505, 81 PUR NS 161, 166, 93 L ed 1499, 69 S Ct 1251, we observed that the "natural and clear meaning" of the phrase "production or gathering of natural gas" is that it encompasses "the producing properties and gathering facilities of a natural-gas company." Similarly, in Colorado Interstate Gas Co. v. Federal Power Commission, 324 US 581, 598, 58 PUR NS 65, 76, 89 L ed

[4] 10 FPC *supra*, at p. 278, 90 PUR NS *supra*, at p. 351.

[5] The consistency of the commission in this regard may be questioned. Compare: Re Columbian Fuel Corp. (1940) 2 FPC 200, 35 PUR NS 3, with Re Interstate Nat. Gas Co. (1943) 3 FPC 416, 48 PUR NS 267; Brief for Federal Power Commission, Interstate Nat. Gas Co. v. Federal Power Commission (CCA5th 1946) 65 PUR NS 1, 156 F2d 949, with Brief for Federal Power Commission, Interstate Nat. Gas Co. v. Federal Power Commission (1947) 331 US 682, 69 PUR NS 1, 91 L ed 1742, 67 S Ct 1482; Federal Power Commission Order No. 139, 12 Fed Reg 5585, with Federal Power Commission Order No. 154, 15 Fed Reg 4633. See Scanlan, Administrative Abnegation in the Face of Congressional Coercion: The Interstate Natural Gas Company Affair (1947–1948) 23 Notre Dame Lawyer, 173; Note, 59 Yale LJ 1468, 1479–1484. And, for that matter, even consistent error is still error.

1206, 65 S Ct 829, we stated that "[t]ransportation and sale do not include production or gathering," and indicated that the "production or gathering" exemption applies to the physical activities, facilities, and properties used in the production and gathering of natural gas. Id., at pp. 602, 603, 58 PUR NS at pp. 79, 80. See also Federal Power Commission v. Hope Nat. Gas Co. (1944) 320 US 591, 612–615, 51 PUR NS 193, 206–208, 88 L ed 333, 64 S Ct 281; Peoples Nat. Gas Co. v. Federal Power Commission (1942) 75 US App DC 235, 44 PUR NS 375, 127 F2d 153; cf. United States v. California Pub. Utilities Commission (1953) 345 US 295, 307–311, 98 PUR NS 65, 72–75, 97 L ed 1020, 73 S Ct 706.[6]

Even more directly in point is our decision in Interstate Nat. Gas Co. v. Federal Power Commission (cited in note 5). The Interstate Company produced or purchased natural gas which it in turn sold and delivered to three interstate pipeline companies, all the activities occurring within the same state. We noted that "[e]xceptions to the primary grant of jurisdiction in the section [1(b)] are to be strictly construed,"[7] 331 US at p. 691, 69 PUR NS at p. 7, and held that § 1(b) conferred jurisdiction over such sales on the Federal Power Commission, stating:

"Petitioner asserts . . . that the sales to the three pipeline companies are a part of the gathering process and consequently not within the commission's power of regulation. This basic contention has given rise to a great many subsidiary questions such as whether the sales were made from petitioner's 'gathering' lines or from petitioner's 'transmission' lines and whether the gathering process continued to the points of sale or was, as the commission found, completed at some point prior to surrender of custody and passage of title. We have found it unnecessary to resolve those issues. The gas moved by petitioner to the points of sale consisted of gas produced from petitioner's wells commingled with that produced and gathered by other companies and introduced into petitioner's pipeline system during the course of the movement. By the time the sales are consummated, nothing further in the gathering process remains to be done. We have held that these sales are in interstate commerce. It cannot be doubted that their regulation is predominantly a matter of national, as contrasted to local, concern. All the gas sold in these transactions is destined for

[6] Referring to the taking of natural gas by purchasing interstate pipeline companies at the outlet of processing plants, we recently observed that the pipeline companies obviously "are not engaged in 'gathering gas' within the meaning of that term in its ordinary usage; . . . ." Michigan-Wisconsin Pipe Line Co. v. Calvert (1954) 347 US 157, 164, 74 S Ct 396, 400.

[7] The committee reports on the bill enacted as the Natural Gas Act, H. R. 6586, 75th Cong., 1st Sess., reveal that a construction of the "production or gathering" exemption which would substantially limit the affirmative grant of jurisdiction to the commission was not contemplated. After quoting the exemptive clause of § 1(b), the House Report states that:

"The quoted words are not actually necessary, as the matters specified therein could not be said fairly to be covered by the language affirmatively stating the jurisdiction of the commission, but similar language was in previous bills, and, rather than invite the contention, however unfounded, that the elimination of the negative language would broaden the scope of the act, the committee has included it in this bill." H. R. Rep. No. 709, 75th Cong., 1st Sess. 3.

The Senate Report adopted and reprinted the House Report on the bill. S. Rep. No. 1162, 75th Cong., 1st Sess.

consumption in states other than Louisiana. Unreasonable charges exacted at this stage of the interstate movement become perpetuated in large part in fixed items of costs which must be covered by rates charged subsequent purchasers of the gas, including the ultimate consumer. It was to avoid such situations that the Natural Gas Act was passed." Id., at pp. 692, 693, 69 PUR NS at pp. 7, 8.

Petitioners attempt to distinguish the Interstate Case on the grounds that the Interstate Company transported the gas in its pipelines after completion of gathering and before sale, and that the Interstate Company was affiliated with an interstate pipeline company and therefore subject to commission jurisdiction in any event. This court, however, refused to rely on such refinements[8] and instead based its decision in Interstate on the broader ground that sales in interstate commerce for resale by producers to interstate pipeline companies do not come within the "production or gathering" exemption.

[3] The Interstate Case is also said to be distinguishable in that it did not involve an asserted conflict with state regulation, and federal control was not opposed by the state authorities, while in the instant cases there are said to be conflicting state regulations, and federal jurisdiction is vigorously opposed by the producing states. The short answer to this contention is that the jurisdiction of the Federal Power Commission was not intended to vary from state to state, depending upon the degree of state regulation and of state opposition to federal control. We expressly rejected any implication to the contrary, in the Interstate Case, 331 US at 691, 692, 69 PUR NS at pp. 7, 8. See Federal Power Commission v. Hope Nat. Gas Co. *supra*, 320 US at pp. 607–615, 51 PUR NS at pp. 203–208.

The cases discussed above supply a ready answer to the determination of the commission and also to petitioners' suggestion that "production or gathering" should be construed to mean the "business" of production and gathering, with the sale of the product considered as an integral part of such "business." We see no reason to depart from our previous decisions, especially since they are consistent with the language and legislative history of the Natural Gas Act.

[4] In general, petitioners contend that Congress intended to regulate only the interstate pipeline companies since certain alleged excesses of those companies were the evil which brought about the legislation. If such were the case, we have difficulty in perceiving why the commission's jurisdiction over the transportation *or* sale for resale in interstate commerce of natural gas is granted in the disjunctive. It would have sufficed to give the commission jurisdiction over only those natural-gas companies that engage in "transportation" or "transportation *and* sale for resale" in interstate commerce, if only interstate pipeline companies were intended to be covered.[9] See Federal Power Commission v.

[8] Despite the fact that they were urged by the commission as a basis for decision. Brief for Federal Power Commission, Interstate Nat. Gas Co. v. Federal Power Commission, *supra*, note 5.

[9] Just such wording was suggested to and rejected by the House Committee considering enactment of the Natural Gas Act, by the chairman of the State of New York Department of Public Service, Public Service Com-

East Ohio Gas Co. (1950) 338 US 464, 468, 82 PUR NS 1, 4, 94 L ed 268, 70 S Ct 266.

Rather, we believe that the legislative history indicates a congressional intent to give the commission jurisdiction over the rates of all wholesales of natural gas in interstate commerce, whether by a pipeline company or not and whether occurring before, during, or after transmission by an interstate pipeline company.[10] There can be no dispute that the overriding congressional purpose was to plug the "gap" in regulation of natural-gas companies resulting from judicial decisions prohibiting, on federal constitutional grounds, state regulation of many of the interstate commerce aspects of the natural-gas business.[11] A significant part of this gap was created by cases[12] holding that "the regulation of wholesale rates of gas and electric energy moving in interstate commerce is beyond the constitutional powers of the states." Interstate Nat. Gas Co. v. Federal Power Commission (1947) 331 US 682, 689, 69 PUR NS 1, 6, 91 L ed 1742, 67 S Ct 1482. The committee reports on the bill that became the Natural Gas Act specifically referred to two of these cases and to the necessity of federal regulation to occupy the hiatus created by

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mission. Hearings before House Committee on Interstate and Foreign Commerce on H. R. 4008, 75th Cong., 1st Sess. 146, 147.

An earlier bill, H. R. 11662, 74th Cong., 2d Sess., would have limited the jurisdiction of the Power Commission to "the transportation of natural gas in high-pressure mains in interstate commerce and to natural-gas companies engaged in such transportation . . . ." Much of the legislative history advanced in support of petitioners' position was developed in connection with this bill, including the testimony of Dozier A. DeVane, Solicitor of the Federal Power Commission. Because of the much different jurisdictional provision of H. R. 11662, such testimony has little relevance here.

[10] The bill on which were held the hearings leading to the passage of the Natural Gas Act, H. R. 4008, 75th Cong., 1st Sess., as introduced, provided, in § 1(b), for commission jurisdiction over the sale of natural gas in interstate commerce "for resale to the public." Similarly, "natural-gas company" was defined, in § 2(5), as including a person engaged in the sale of natural gas in interstate commerce "for resale to the public." The general solicitor of the National Association of Railroad and Utilities Commissioners suggested that the language be changed in a manner almost identical to that contained in the Natural Gas Act. Referring to the proposed changes, he commented that:

"Another is designed to make certain that the bill will apply to all intercompany sales of natural gas at wholesale, even though the sale be from one company to another company which will resell to another corporation before the gas is finally sold to the public." Hearings before House Committee on Interstate and Foreign Commerce on H. R. 4008, 75th Cong., 1st Sess. 22.

See also id., at pp. 141–143.

[11] Federal Power Commission v. East Ohio Gas Co. (1950) 338 US 464, 472, 473, 82 PUR NS 1, 94 L ed 268, 70 S Ct 266; Federal Power Commission v. Panhandle Eastern Pipe Line Co. (1949) 337 US 498, 502–504, 81 PUR NS 161, 93 L ed 1499, 69 S Ct 1251; Panhandle Eastern Pipe Line Co. v. Indiana Pub. Service Commission (1947) 332 US 507, 514–521, 71 PUR NS 97, 92 L ed 128, 68 S Ct 190; Interstate Nat. Gas Co. v. Federal Power Commission (1947) 331 US 682, 689–693, 69 PUR NS 1, 91 L ed 1742, 67 S Ct 1482; Colorado Interstate Gas Co. v. Federal Power Commission (1945) 324 US 581, 599, 600, 58 PUR NS 65, 89 L ed 1206, 65 S Ct 829; Federal Power Commission v. Hope Nat. Gas Co. (1944) 320 US 591, 609, 610, 51 PUR NS 193, 88 L ed 333, 64 S Ct 281; Illinois Nat. Gas Co. v. Central Illinois Pub. Service Co. (1942) 314 US 498, 506–508, 42 PUR NS 53, 86 L ed 371, 62 S Ct 384.

[12] Missouri ex rel. Barrett v. Kansas Nat. Gas Co. 265 US 298, PUR1924E 78, 68 L ed 1027, 44 S Ct 544; Rhode Island Pub. Utilities Commission v. Attleboro Steam & Electric Co. 273 US 83, PUR1927B 348, 71 L ed 549, 47 S Ct 294; Kansas State Corp. Commission v. Wichita Gas Co. (1934) 290 US 561, 1 PUR NS 433, 78 L ed 500, 54 S Ct 321; cf. Dahnke-Walker Milling Co. v. Bondurant (1921) 257 US 282, 66 L ed 239, 42 S Ct 106; Lemke v. Farmers' Grain Co. (1922) 258 US 50, 66 L ed 458, 42 S Ct 244; Shafer v. Farmers Grain Co. (1925) 268 US 189, 69 L ed 909, 45 S Ct 481. And see Jersey Central Power & Light Co. v. Federal Power Commission (1943) 319 US 61, 69, 48 PUR NS 129, 87 L ed 1258, 63 S Ct 953.

them.[13] Thus, we are satisfied that Congress sought to regulate wholesales of natural gas occurring at both ends of the interstate transmission systems.

[5] Petitioners cite our recent decisions in Cities Service Gas Co. v. Peerless Oil & Gas Co. (1950) 340 US 179, 87 PUR NS 41, 95 L ed 190, 71 S Ct 215, and Phillips Petroleum Co. v. Oklahoma (1950) 340 US 190, 87 PUR NS 48, 95 L ed 204, 71 S Ct 221, as authority for the proposition that the states may regulate the sales in question here and, hence, that such sales are not within the gap which the Natural Gas Act was intended to fill. Those cases upheld as constitutional state *minimum* price orders, justified as conservation measures, applying to sales of natural gas in interstate commerce. But it is well settled that the gap referred to is that thought to exist at the time the Natural Gas Act was passed, and the jurisdiction of the commission is not affected by subsequent decisions of this court which have somewhat loosened the constitutional restrictions on state activities affecting interstate commerce, in the absence of conflicting federal regulation. Illinois Nat. Gas Co. v. Central Illinois Pub. Service Co. [cited note 11] 314 US at p. 508, 42 PUR NS at p. 58; Federal Power Commission v. East Ohio Gas Co. [cited note 11] 338 US at p. 472, 82 PUR NS at p. 6. The Federal Power Commission did not participate in the Cities Service and Phillips Petroleum Cases, *supra,* the appellants there did not assert a possible conflict with federal authority under the Natural Gas Act, and consequently we expressly refused to consider at that time "[w]hether the Gas Act authorizes the Power Commission to set field prices on sales by independent producers, or leaves that function to the states . . . ." 340 US at pp. 188, 189, 87 PUR NS at p. 47.

Regulation of the sales in interstate commerce for resale made by a so-called independent natural gas producer is not essentially different from regulation of such sales when made by an affiliate of an interstate pipeline company. In both cases, the rates charged may have a direct and substantial effect on the price paid by the ultimate consumers. Protection of consumers against exploitation at the hands of natural-gas companies was the primary aim of the Natural Gas Act. Federal Power Commission v. Hope Nat. Gas Co. *supra,* 320 US at p. 610, 51 PUR NS at p. 205. Attempts to weaken this protection by amendatory legislation exempting independent natural gas producers from

[13] "The states have, of course, for many years regulated sales of natural gas to consumers in intrastate transactions. The states have also been able to regulate sales to consumers even though such sales are in interstate commerce, such sales being considered local in character and in the absence of congressional prohibition subject to state regulation. . . . There is no intention in enacting the present legislation to disturb the states in their exercise of such jurisdiction. However, in the case of sales for resale, or so-called wholesale sales, in interstate commerce (for example, sales by producing companies to distributing companies) the legal situation is different. Such transactions have been considered to be not local in character and, even in the absence of congressional action, not subject to state regulation. (See Missouri ex rel. Barrett v. Kansas Nat. Gas Co. [*supra,* note 12], and Rhode Island Pub. Service Commission v. Attleboro Steam & Electric Co. [*supra,* note 12]. The basic purpose of the present legislation is to occupy this field in which the Supreme Court has held that the states may not act." H. R. Rep. No. 709, 75th Cong., 1st Sess. 1, 2; S. Rep. No. 1162, 75th Cong., 1st Sess. 1, 2.

federal regulation have repeatedly failed,[14] and we refuse to achieve the same result by a strained interpretation of the existing statutory language.

The judgment is

Affirmed.

Mr. Justice Jackson took no part in the consideration or decision of these cases.

Mr. Justice FRANKFURTER, concurring: While I join the opinion of the court, one consideration leading to the court's conclusion is for me so decisive that I deem it appropriate to give it emphasis.

Section 1(b) is not to be construed on its face. It comes to us with an authoritative gloss. We must construe it as though Congress had, in words, added to the present text of § 1(b) some such language as the following:

"However, since sales for resale, or so-called 'wholesale sales,' in interstate commerce are not local in character and are constitutionally not subject to state regulation (see Missouri ex rel. Barrett v. Kansas Nat. Gas Co., 265 US 298, PUR1924E 78, 68 L ed 1027, 44 S Ct 544, and Rhode Island Pub. Utilities Commission v. Attleboro Steam & Electric Co. 273 US 83, PUR1927B 348, 71 L ed 549, 47 S Ct 294) the basic purpose of the legislation is to occupy this field in which the states may not act."

The section must be read with such an interpolation because Congress said specifically that the Natural Gas Act was designed to cover the situations which the two cited cases held to be outside the competence of state regulation. H. R. Rep. No. 709, 75th Cong., 1st Sess. 1–2; S. Rep. No. 1162, 75th Cong., 1st Sess. 1, 2.[1]

To be sure, the Kansas Gas Case excluded the business of piping gas by a supply company in one state to distributing companies in another; and the Attleboro Case involved the transmission of electric current by a producing company which took it from one state to the boundary of another state and there sold it to a distributing company for resale in the other state. In this case, the sale by Phillips was made in Texas to interstate pipeline transmission companies which transported the gas for resale to distributing companies and consumers in other states. But this fact—that Phillips itself did not pipe the gas to the state boundary or directly into another state—does not in the slightest alter the

[14] Among the bills introduced in recent Congresses to restrict the existing jurisdiction of the Federal Power Commission over natural-gas producers are: H. R. 4051, 80th Cong., 1st Sess.; H. R. 4099, 80th Cong., 1st Sess.; H R. 1758, 81st Cong., 1st Sess.; and S. 1498, 81st Cong., 1st Sess.

[1] "The states have, of course, for many years regulated sales of natural gas to consumers in intrastate transactions. The states have also been able to regulate sales to consumers even though such sales are in interstate commerce, such sales being considered local in character and in the absence of congressional prohibition subject to state regulation. (See Pennsylvania Gas Co. v. New York Pub. Service Commission, 252 US 23, PUR1920E 18, 64 L ed 434, 40 S Ct 279.) There is no intention in enacting the present legislation to disturb the states in their exercise of such jurisdiction. However, in the case of sales for resale, or so-called wholesale sales, in interstate commerce (for example, sales by producing companies to distributing companies) the legal situation is different. Such transactions have been considered to be not local in character and, even in the absence of congressional action, not subject to state regulation. (See Missouri ex rel. Barrett v. Kansas Nat. Gas Co. *supra*, and Rhode Island Pub. Service Commission v. Attleboro Steam & Electric Co. *supra*.) The basic purpose of the present legislation is to occupy this field in which the Supreme Court has held that the states may not act" H. R. Rep. No. 709, 75th Cong., 1st Sess. 1, 2.

constitutional applicability of the Attleboro doctrine to the situation before us. The fact that the continuous transmission is not by facilities of Phillips but by the facilities of Phillips connecting with pipelines transmitting gas into other states does not change the interstate character of the transaction. For that reason, the decision in the Attleboro Case, *supra,* 273 US at p. 86, PUR1927B at p. 350, relying on Peoples Nat. Gas Co. v. Pennsylvania Pub. Service Commission, 270 US 550, PUR1926D 187, 70 L ed 726, 46 S Ct 371, barred state regulation.

It may well be that if the problem in the Attleboro Case, *supra,* came before the court today, the constitutional doctrine there laid down would not be found compelling. This is immaterial. Congress did not leave it to the determination of this court whether an Attleboro situation is subject to state regulation. It wrote the doctrine of the Attleboro Case into the Natural Gas Act and said in effect that an Attleboro situation was to be taken over by federal regulation and was not to be left to the fluctuation of adjudications under the Commerce Clause.

Mr. Justice CLARK, with whom Mr. Justice BURTON concurs, dissenting: Perhaps Congress should have included control over the production and gathering of natural gas among the powers it gave the Federal Power Commission in the Natural Gas Act, but this Congress did not do. On the contrary, Congress provided that the act "shall not apply . . . to the production or gathering of natural gas." Language could not express a clearer command, but the majority renders this language almost entirely nugatory by holding that the rates charged by a wholly independent producer and gatherer may be regulated by the Federal Power Commission. Nor does the court stop there, for in the sweep of the opinion "the rates of *all wholesales* of natural gas in interstate commerce, whether by a pipeline company or not and whether occurring before, during, or after transmission by an interstate pipeline company," are covered under the act. *Supra,* at p. 135 (Emphasis supplied.) On its face, this language brings every gas operator, from the smallest producer to the largest pipeline, under federal regulatory control. In so doing, the court acts contrary to the intention of the Congress, the understanding of the states, and that of the Federal Power Commission itself. The Federal Power Commission is thereby thrust into the regulatory domain traditionally reserved to the states.

The natural gas industry, like ancient Gaul, is divided into three parts. These parts are production and gathering, interstate transmission by pipeline, and distribution to consumers by local distribution companies. A business unit may perform more than one of these functions—typically, production and gathering in addition to interstate transmission. But Phillips' natural gas operations are confined exclusively to the first part—production and gathering. It has no interstate transmission or high-pressure trunk lines and does not sell to distribution companies; and it does not, of course, distribute to the ultimate consumer. Its nine gathering systems merely bring the gas from its own and other producers' wells to its central plants in the producing fields so it

can be rendered usable as fuel. Since there are no facilities for storage, the amount of gas, other than casinghead,[1] produced and gathered each day depends on the day-to-day demands of the interstate pipelines, which in turn depend on weather and other conditions in consuming areas. Gas wells are cut on and off as the market demand for the gas requires. Gathering takes place by well pressure forcing the gas through numerous small pipes connecting each well with the central gathering plant or processing station. It is there that the gas first comes to a common "header" and is processed for use as fuel. The processing of the gas at this central gathering plant is necessary to remove hydrocarbons, hydrogen sulphide, and other foreign elements in order to permit its use as fuel. The plant operates only while the wells are producing. All of Phillips' operations, including the acreage from which the wells produce the gas, the wells themselves, the lines that connect with each of them and run to the central plant, form a closely knit unit that is entirely local to the field involved. After processing, the gas is immediately delivered to the interstate pipelines under long-term sales contracts.

The commission found that "[t]hough technically consummated in interstate commerce, these sales [by Phillips to the pipelines] are made 'during the course of production and gathering,'" and that the sales "are so closely connected with the local incidents of [production and gathering] as to render rate regulation by this commission inconsistent or a substantial interference with the exercise by the affected states of their regulatory functions." ([1951] 10 FPC 246, 278, 90 PUR NS 325, 352.) We believe that this finding is correct and that it should be approved by the court.

If there be any doubt that Congress thought the "production and gathering" exemption saved Phillips' sales from Federal Power Commission regulation, the act's legislative history removes it. The solicitor of the commission, Mr. Dozier DeVane, at hearings in connection with a predecessor of the bill that finally became the Natural Gas Act, testified that the Federal Power Commission would have no jurisdiction over the rates for natural gas "that are paid in the gathering field." Hearings before Subcommittee of Committee on Interstate and Foreign Commerce on H. R. 11662, 74th Cong., 2d Sess., p. 28 (1937). The bill, he said, "does not attempt to regulate the gathering rates or the gathering business." Id., 34. See also, id., 42, 43. The bill about which Mr. DeVane testified has been described as "substantially similar to the Natural Gas Act," and his views have been treated as authoritative by this court. Federal Power Commission v. Panhandle Eastern Pipe Line Co. (1949) 337 US 498, 505, 81 PUR NS 161, 166, 93 L ed 1499, 69 S Ct 1251, note 7. See also Federal Power Commission v. East Ohio Gas Co. (1950)

[1] Casinghead gas is produced with oil and furnishes the pressure under which the latter is brought to the surface. The gas cannot be shut off without closing down the oil production and it therefore is produced, regardless of demand, since the primary recovery is oil. If there are no available purchasers the gas is flared (burned). In some fields as much as one-third of the casinghead gas is still flared since no market is immediately available. Sound conservation practice dictates that, whenever possible, casinghead gas be used to satisfy demand before natural gas wells are turned on.

338 US 464, 472, 82 PUR NS 1, 6, 94 L ed 268, 70 S Ct 266, note 12. In the face of this as well as the Federal Power Commission's adherence to the DeVane views ever since its first cases on the subject, Re Columbian Fuel Corp. (1940) 2 FPC 200, 35 PUR NS 3, Re Billings Gas Co. (1940) 2 FPC 288, 35 PUR NS 321, and in the absence of any specific matter in the act's legislative history refuting the DeVane views, the court today erroneously finds that "DeVane's testimony has little relevance here." *Supra,* note 9, p. 134.

There is no dispute that Congress intended the Natural Gas Act to close the "gap" created by decisions of this court barring state regulation of certain interstate gas sales. The legislative history of the act refers to two decisions. Missouri ex rel. Barrett v. Kansas Nat. Gas Co. 265 US 298, PUR1924E 78, 68 L ed 1027, 44 S Ct 544; Rhode Island Pub. Utilities Commission v. Attleboro Steam & Electric Co. 273 US 83, PUR1927B 348, 71 L ed 549, 47 S Ct 294. See H. R. Rep. No. 709, 75th Cong., 1st Sess., pp. 1, 2 (1937). But these cases had nothing to do with sales to interstate pipelines by wholly independent, unintegrated, and unaffiliated producers and gatherers, such as Phillips. Neither of the companies involved in those cases was engaged exclusively in production and gathering; both were producing and transportation companies, Kansas of natural gas, Attleboro of electricity; both Kansas and Attleboro sold to distributing companies in the course of interstate transmission. Thus, when the House Report, id., 1, 2, expressed the act's aim to regulate wholesales such as "sales by producing companies to distributing companies," and immediately thereafter cited the Kansas and Attleboro Cases, the report's unmistakable reference was to sales by an integrated "producer-pipeline" to the local distributor. It could not refer to an independent producer and gatherer because, first, such an independent never sells to local distributors and, secondly, the two cited cases do not support a reference to such independents. That Congress aimed at abuses resulting in the "gap" at the end of the transmission process by integrated and unintegrated pipelines and not at abuses prior to transmission is clear from the final report of the Federal Trade Commission to the Senate on malpractices in the natural gas industry. S. Doc. No. 92, 70th Cong., 1st Sess. (1935). This report was the stimulus for federal intervention in the industry. The Federal Trade Commission outlined the abuses in the industry which the "gap" made the states powerless to prevent; the abuses were by monopolistically situated pipelines which gouged the consumer by charging local distribution companies unreasonable rates. The Federal Trade Commission did not find abusive pricing by independent producers and gatherers; if anything, the independents at the producing end of the pipelines were likewise the victims of monopolistic practices by the pipelines.

And our decisions have certainly indicated that the "gap" was at the distribution end of the transmission process. Thus, in Federal Power Commission v. Hope Nat. Gas Co. (1944) 320 US 591, 612–614, 51 PUR NS 193, 206, 207, 88 L ed 333, 64 S Ct 281, the court observed that

"the Federal Power Commission was given *no authority* over 'the production or gathering of natural gas' " and that the producing states had the power "to protect the interests of those who sell their gas to the interstate operators." (Emphasis supplied.) Five years later, in Federal Power Commission v. Panhandle Eastern Pipe Line Co. *supra,* the court said its approval of the commission's inclusion of the cost of production and gathering facilities of an interstate pipeline in the latter's rate base "is not a precedent for regulation of any part of production or *marketing.*" 337 US at p. 506, 81 PUR NS at p. 167.

By today's decision, the court restricts the phrase "production and gathering" to "the physical activities, facilities, and properties" used in production and gathering. Such a gloss strips the words of their substance. If the Congress so intended, then it left for state regulation only a mass of empty pipe, vacant processing plants and thousands of hollow wells with scarecrow derricks, monuments to this new extension of federal power. It was not so understood. The states have been for over 35 years and are now enforcing regulatory laws covering production and gathering, including *pricing,* proration of gas, ratable taking, unitization of fields, processing of casinghead gas including priority over other gases, well spacing, repressuring, abandonment of wells, marginal area development, and other devices. Everyone is fully aware of the direct relationship of price and conservation. Federal Power Commission v. Panhandle Eastern Pipe Line Co. *supra,* 337 US at p. 507, 81 PUR NS at p. 167. And the power of the states to regulate the producer's and gatherer's prices has been upheld in this court. Cities Service Gas Co. v. Peerless Oil & Gas Co. (1950) 340 US 179, 87 PUR NS 41, 95 L ed 190, 71 SCt 215; Phillips Petroleum Co. v. Oklahoma (1950) 340 US 190, 87 PUR NS 48, 95 L ed 204, 71 S Ct 221. There can be no doubt, as the commission has found, that federal regulation of production and gathering will collide and substantially interfere with and hinder the enforcement of these state regulatory measures. We cannot square this result with the House Report on this act which states that the subsequently enacted bill "is so drawn as to complement and in no manner usurp state regulatory authority." H. R. Rep. No. 709, *supra,* at p. 2.

The majority rely heavily on Interstate Nat. Gas Co. v. Federal Power Commission (1947) 331 US 682, 69 PUR NS 1, 91 L ed 1742, 67 S Ct 1482, to support their position. To be sure, there is language in that case which on its face seems to govern the present case. Id., at pp. 692, 693, 69 PUR NS at pp. 7, 8. But that case involved a materially different fact situation. The Interstate Gas Company was already subject to Federal Power Commission jurisdiction because of its interstate pipeline operations; and the company was affiliated with one of the pipelines to which it sold. In addition, the court emphasized the fact that in Interstate no claim to state regulatory authority was made. Indeed, the Interstate Company had successfully resisted state attempts to regulate. Hence there was no possibility of conflict in that case; either the Federal Power Commission moved

in or Interstate would have remained unregulated. But perhaps a more significant factual distinction in terms of the court's reasoning in that case rests in the fact that of the total volume of gas Interstate sold, roughly 42 per cent had been purchased from others who had produced *and gathered* it. This 42 per cent was almost enough to supply all the needs of the three interstate pipelines to which Interstate sold. And the 42 per cent, already gathered and processed, moved into and through Interstate's branch, trunk, and main trunk lines. In short, Interstate was the equivalent of a middleman between gatherers and the pipelines for almost all the gas it sold to the pipelines and performed the function of transporting the gas it purchased from other gatherers through its branch, trunk, and main trunk lines. Phillips performs no such middleman or transmission function. In addition, the late Chief Justice Vinson in that case specifically stated that: "We express no opinion as to the validity of the jurisdictional tests employed by the commission in these cases [Re Columbian Fuel Corp. (1940) 2 FPC 200, 35 PUR NS 3; Re Billings Gas Co. (1940) 2 FPC 288, 35 PUR NS 321]." 331 US at pp. 690, 691, 69 PUR NS at p. 6, note 18. Since it was in those cases that the Federal Power Commission established the policy of declining jurisdiction over the rates charged by wholly independent producers and gatherers, it is difficult to see how Interstate can control the present case.

If we look to Interstate for guidance, we would do better to focus on the following words of the late Chief Justice:

"Clearly, among the powers thus reserved to the states is the power to regulate the physical production and gathering of natural gas in the interests of conservation or of any other consideration of legitimate local concern. It was the intention of Congress to give the states full freedom in these matters. Thus, where sales, though technically consummated in interstate commerce, are made during the course of production and gathering and are so closely connected with the local incidents of that process as to render rate regulation by the Federal Power Commission inconsistent or a substantial interference with the exercise by the state of its regulatory functions, the jurisdiction of the Federal Power Commission does not attach." 331 US at p. 690, 69 PUR NS at p. 6.

Even a cursory examination of Phillips' operations reveals how completely local they are and how incidental to them are its sales to the pipelines. Moreover, federal regulation of these sales means an inevitable clash with a complex of state regulatory action, including minimum pricing. These were matters found by the Federal Power Commission in language obviously patterned after the above quotation. The clear import of the cited words is that Federal Power Commission jurisdiction "does not attach" in such a situation.

In the words of Mr. Justice Jackson, we believe "that observance of good faith with the states requires that we interpret this act as it was represented at the time they urged its enactment, as its terms read, and as we have, until today, declared it, viz., to supplement but not to supplant state regulation." Federal Power Commis-

sion v. East Ohio Gas Co. (1950) 338 US 464, 490, 82 PUR NS 1, 17, 94 L ed 268, 70 S Ct 266.

Mr. Justice DOUGLAS, dissenting: The question is whether sales of natural gas by an *independent producer* at the mouth of an interstate pipeline are subject to regulation by the Federal Power Commission under the Natural Gas Act of 1938. This is a question the court has never decided. It is indeed one on which we expressly reserved decision in Interstate Nat. Gas Co. v. Federal Power Commission (1947) 331 US 682, 690, 69 PUR NS 1, 6, 91 L ed 1742, 67 S Ct 1482, note 18.

There is much to be said from the national point of view for regulating sales at both ends of these interstate pipelines. The power of Congress to do so is unquestioned. Whether it did so by the Natural Gas Act of 1938 is a political and legal controversy that has raged in the commission and in the Congress for some years. The question is not free from doubts. For while § 1(b) of the act makes the regulatory provisions applicable "to the sale in interstate commerce of natural gas for resale for ultimate public consumption," it also makes them inapplicable "to the production or gathering of natural gas."

The sale by this independent producer is a "sale in interstate commerce . . . for resale." It is also an integral part of "the production or gathering of natural gas," as Mr. Justice Clark makes clear in his opinion, for it is the end phase of the producing and gathering process. So we must make a choice; and the choice is not an easy one.

The legislative history is not helpful. Congress was concerned with interstate pipelines, not with *independent producers,* as the thoughtful Comment in 59 Yale LJ 1468 points out. If one can judge by the reports of the Federal Trade Commission that preceded the act (S. Doc. No. 92, Pt. 84–A, 70th Cong., 1st Sess.), and the hearings and debates in Congress on the bills that evolved into the act, little or no consideration was given to the need of regulating the sales by *independent producers* to the pipelines. The gap to be filled was that existing before the pipelines were brought under regulation—sales to distributors along the pipelines, as the opinion of Mr. Justice Clark demonstrates.

That was the view of the commission in a decision that followed on the heels of the act. Re Columbian Fuel Corp. (1940) 2 FPC 200, 207, 35 PUR NS 3, 9. That decision exempted from regulation an independent producer to whom Phillips is in all material respects comparable. It was a decision made by men intimately familiar with the background and history of the act—Leland Olds, Basil Manly, Claude L. Draper, and Clyde L. Seavey. One commissioner, John W. Scott, dissented. That construction of the act by the commission has persisted from that time (see Re Billings Gas Co. [1940] 2 FPC 288, 35 PUR NS 321; Re The Fin-Ker Oil & Gas Production Co. [1947] 6 FPC 92, 69 PUR NS 85; Re Tennessee Gas & Transmission Co. [1947] 6 FPC 98, 70 PUR NS 123) down to its decision in the present case. 10 FPC 246, 90 PUR NS 325.

This construction by the commission, especially since it was contemporaneous (United States v. American

Trucking Associations [1940] 310 US 534, 539, 35 PUR NS 486, 84 L ed 1345, 60 S Ct 1059) and long continued (Federal Power Commission v. Panhandle Eastern Pipe Line Co. [1949] 337 US 498, 513, 81 PUR NS 161, 93 L ed 1499, 69 S Ct 1251), is entitled to great weight. Other obtuse questions no less legal in character than the terms "production or gathering" of gas have been entrusted to the administrative agency charged with the regulation. See Shields v. Utah Idaho C. R. Co. (1938) 305 US 177, 83 L ed 111, 59 S Ct 160; Sunshine Anthracite Coal Co. v. Adkins (1940) 310 US 381, 84 L ed 1263, 60 S Ct 907; Gray v. Powell (1941) 314 US 402, 86 L ed 301, 62 S Ct 326.

There are practical considerations which buttress that position and lead me to conclude that we should not reverse the commission in the present case. If Phillips' sales can be regulated, then the commission can set a rate base for Phillips. A rate base for Phillips must of necessity include all of Phillips' producing and gathering properties; and supervision over its operating expenses necessarily includes supervision over its producing and gathering expenses. We held in Colorado Interstate Gas Co. v. Federal Power Commission (1945) 324 US 581, 58 PUR NS 65, 89 L ed 1206, 65 S Ct 829, that the commission's control extended that far in the case of an interstate pipeline company which owned producing and gathering properties. And so it had to be, if regulation of the pipelines that owned their own gas supplies was to be effective. But an understanding of what regulation entails should lead to a different result in this case. The fastening of rate regulation on this *independent producer* brings "the production or gathering of natural gas" under effective federal control, in spite of the fact that Congress has made that phase of the natural gas business exempt from regulation. The effect is certain to be profound. The price at which the *independent producer* can sell his gas determines the price he is able or willing to pay for it (if he buys from other wells). The sales price determines his profits. And his profits and the profits of all the other gatherers, whose gas moves into the interstate pipelines, have profound effects on the rate of production, the methods of production, the old wells that are continued in production, the new ones explored, etc. Regulating the price at which the *independent producer* can sell his gas regulates his business in the most vital way any business can be regulated. That regulation largely nullifies the exemption granted by Congress.

There is much to be said in terms of policy for the position of Commissioner Scott, who dissented the first time the commission ruled it had no jurisdiction over these sales. But the history and language of the act are against it. If that ground is to be taken, the battle should be won in Congress, not here. Regulation of the business of producing and gathering natural gas involves considerations of which we know little and with which we are not competent to deal.

FLORIDA SUPREME COURT

Florida Telephone Corporation

v.

Jerry W. Carter et al.

— Fla —, 70 So2d 508
February 16, 1954

EN BANC. REVIEW *of commission order denying telephone rate increase; order quashed and commission directed to enter new order. For commission decision, see (1953) 1 PUR3d 18.*

Rates, § 43 — Commission powers — Scope of proceeding — Service questions.

1. The commission may not make service orders in a rate proceeding, p. 147.

Rates, § 36 — Commission power — Denial of increase — Service inadequacies — Penalties.

2. The commission has no power to deny a rate increase, which it has found to be just, by inflicting a penalty because of poor or inadequate service, p. 147.

APPEARANCES: C. Farris Bryant, Green & Bryant, Ocala, and Ausley, Collins & Ausley, Tallahassee, and William C. Harris, St. Petersburg, and J. Thomas Gurney, Orlando, for petitioner; Lewis W. Petteway, Tallahassee, for Florida Railroad and Public Utilities Commission; Wallace E. Sturgis, Ocala, for Marion county; J. B. Rodgers, Jr., Orlando, for town of Montverde, town of Oakland, and town of Winter Garden; O. P. Johnson, St. Cloud, for town of St. Cloud; James Smith, Jr., Ocala, for city of Ocala; Ellis F. Davis, Kissimmee, for city of Kissimmee; George Dayton, Dade City, for town of Dade City.

MATHEWS, J.: In this case the petitioner filed with the respondents an application for an increase in rates and charges for service. It also requested authority to put into effect group rates for common battery and dial exchanges when certain exchanges were converted. In due course many of the municipalities and others within the territory filed complaints about service. After the taking of voluminous testimony finding that the petitioner was entitled to an increase in its rates, the commission then found that the service was inefficient and that the increased rates should not be put into effect because of a penalty reduction inflicted by respondent on the basis of the quality of the service being rendered. The commission made an order ([1953] 1 PUR NS 18, 26, 27), embodying

the findings, which reads in part as follows:

"(1) A rate base of $5,479,415 represents the reasonable value of applicant's property used and useful in rendering telephone service and upon which it is entitled to earn a fair return.

"(2) A return of 7 per cent, plus an additional return of .13 per cent to take care of the depressing effect of the current high cost of construction on the earning rate, making a total rate of return of 7.13 per cent on the rate base herein found to be reasonable is fair, reasonable, and compensatory and should be allowed if applicant's quality of service warranted rates and charges which would produce such a return.

"(3) In order to produce a return of 7.13 per cent as aforesaid, applicant's general exchange revenue should be increased by the gross amount of $160,015 or 18.359 per cent.

"(4) The quality of the service presently being rendered by applicant throughout its system will not justify rates and charges which will produce the return which we have found to be fair and reasonable. A penalty reduction of approximately 25 per cent in applicant's general exchange rates and charges would be fair and reasonable in view of the inadequate and inefficient service presently being rendered by applicant.

"(5) On the basis of applicant's operating statistics, it is entitled to an increase of 18.359 per cent in its general exchange revenue. However, on the basis of the poor service being rendered, applicant should suffer a penalty reduction of approximately 25 per cent in its general exchange revenue. The granting of the one and the imposition of the other simultaneously would give the utility earnings slightly less than it now receives under present rates. The application, therefore, should be denied without prejudice to applicant's right to renew the same when it has brought its service up to the standard required by the commission and to which the public is entitled and upon which fair and reasonable rates are predicated.

"XI. Order

"Now, therefore, in consideration thereof, it is *ordered, adjudged,* and *decreed* by the Florida Railroad and Public Utilities Commission as follows:

"(1) The findings of law and fact as hereinbefore set forth, together with the discussion of the various elements and factors involved as contained in the body of this order, be and the same are hereby approved in every respect.

"(2) The application of Florida Telephone Corporation for an increase in its general exchange rates and charges be and the same is hereby *denied* without prejudice, however, to the right of said utility to renew said application when it has improved its service to the standard required by this commission and to which the public is entitled."

It, therefore, appears from the record that the commission found that an increase in the rate of return was reasonable and proper, but, on the basis of the testimony, denied any increase on the ground that the service of the petitioner was inadequate.

The question of the reasonableness of the rate or charge for service is not presented in this proceeding. The pe-

titioner claims error because in this proceeding the respondent attempted to offset any increase in rates by imposing and enforcing a penalty based upon the finding by the respondent of inadequate service.

This proceeding began by the filing of the petition for rate increase with the respondent. The question of inadequate service and the infliction of punishment by reason thereof was raised by intervenors or by the respondents.

[1, 2] The primary question with which we are now concerned is whether or not the commission, in the same proceeding in which it found the increase in rates to be just under applicable provisions of the Florida Statutes, may deny such increase by imposing a penalty for inadequate services: To state the question in another way, may a penalty for inadequate service be lawfully imposed, inflicted, and enforced in this rate-making proceedings when the statutes provide other methods for imposing, inflicting, and enforcing penalties for inadequate service?

This question may be answered by a consideration of the Florida Statutes and FSA; namely, §§ 364.03, 364.14. 364.15, 364.21, and Chap 28013, Laws of Florida 1953, FSA § 364.33 et seq.

Florida Stats § 364.03, FSA, concerns returns, tolls, contracts, and charges, and vests in the commission authority to fix the same so that they shall be fair, just, reasonable, and sufficient. We find no authority vested in the commission to make any orders in a rate-making proceeding with reference to inadequate service.

The power and authority of the commission with reference to repairs, improvements, equipment, and service appears to be governed by FS §§ 364.14, 364.15, 364.21, FSA, and Chap 28013, Laws of Florida 1953.

Under our statutes the rate-making power should be exercised in one proceeding and the question of the adequacy or inadequacy of equipment, repairs, improvements, and service should be disposed of in another proceeding.

While the legislature may have the power to change the law and provide for all such matters to be disposed of in one proceeding, it is beyond the power of the commission to change the law. The Florida Railroad and Public Utilities Commission is a creature of the statute and has only such powers as have been granted to it by the legislature. See Atlantic Coast Line R. Co. v. Mack (1952) — Fla —, 57 So2d 447.

The increase in rates affected the entire system. The complaint with reference to poor or inadequate service covered only about 15 per cent of the entire system. The imposition of penalties is covered by sections of the statute different from those authorizing the fixing of rates and are based upon different theories. Elyria Teleph. Co. v. Public Utilities Commission (1953) 158 Ohio St 441, 98 PUR NS 246, 110 NE2d 59.

The respondent commission had no authority to deny an increase in rates which it found to be just, by the means of inflicting a penalty because of poor or inadequate service, and exceeded its jurisdiction when it inflicted such penalty in a rate-making proceeding. If the service is poor or inadequate, the commission may, of its own motion, or upon the complaint of others, take appropriate action as provided by law.

The petition for writ of certiorari is granted and the order, dated September 1, 1953, which is number 1926, 1 PUR3d 18, be and the same is hereby quashed, with directions that the respondent commission enter a proper order in accordance with this opinion.

Roberts, CJ., and Terrell, Thomas, Sebring, Hobson, and Drew, JJ., concur.

NEW YORK PUBLIC SERVICE COMMISSION

Re Long Island Lighting Company

Re Queens Borough Gas & Electric Company; Re Nassau & Suffolk Lighting Company; Re Long Beach Gas Company, Inc.

Case 12215
April 13, 1954

APPLICATION *for authority to modify future depreciation reserves by changing annual depreciation rates, and for approval of accounting treatment of excess in depreciation reserves as of date of consolidation of company with its subsidiaries; granted.*

Depreciation, § 34 — Adjustment in reserves — Modification of annual rate.

1. Future adjustments in an electric company's depreciation reserves, either because they are excessive or inadequate, should be made by modifying the annual depreciation rate, p. 149.

Accounting, § 11.1 — Surplus — Excessive depreciation reserves — Transfers from unearned surplus — Premiums and assessments on capital stock account.

2. An electric company which had consolidated with its operating subsidiaries was authorized to transfer the balance in its unearned surplus account, arising from the excess in the depreciation reserves as of the date of consolidation, to Account 203—Premiums and Assessments on Capital Stock, instead of to Common Capital Stock Account, as previously ordered by the commission, where it was impossible to transfer the amount to the Capital Stock Account except by the issuance of a stock dividend or by a change in the par value of the capital stock, which would require a change in the certificate of incorporation, neither of which the commission has authority to order, p. 150.

By the COMMISSION: By letter dated December 10, 1953, over the signature of David K. Kadane, general counsel, Long Island Lighting Company requests a determination by the commission of certain matters arising from the consolidation of that company with its operating subsid-

iaries (Case 12215). The nature of the determination sought by the company may be stated briefly as follows:

(1) That this commission state "that for accounting and rate-making purposes, the results of future depreciation studies of this company's properties will be reflected by increasing or decreasing the then current annual rates of depreciation, rather than by requiring a change in the amount of the reserves."

(2) That the commission's order adopted September 4, 1951, in Case 12215 be amended to permit the company to transfer the balance in its Unearned Surplus Account, arising from the excess in the depreciation reserves as of June 30, 1950, the date of consolidation, to Account 203, Premiums and Assessments on Capital Stock, instead of to Common Capital Stock Account as directed by the commission in the aforesaid order.

[1] In regard to the first matter cited above the company states it is reluctant to transfer the balance of unearned surplus to capital while there remains the possibility that in a future depreciation restudy the depreciation reserves may have to be increased. In connection with the matter of reserve adjustment reference is made by the company to memorandum of Commissioner Mylott approved by the commission July 8, 1953, in Case 14808, involving the Niagara Mohawk Power Corporation wherein it was stated:

"Normally, after the depreciation practices of a utility have been adjusted to commission standards and future annual depreciation rates have been fixed and adopted by the company, any differences arising in the reserve by reason of the fact that such annual rates are either too high or too low, should be adjusted by changes in such rates in future years."

It may be pointed out that Commissioner Mylott also stated in that memorandum: "While no rule will fit all circumstances, it should be stated that so far as Niagara Mohawk is concerned, future adjustments in the corporation's depreciation reserves, either because they are excessive or inadequate, should be made by modifying the annual depreciation rates."

The company requests that the commission state in effect that the same principle be adopted for required future adjustments of its depreciation reserve.

The determination of the amount of accrued depreciation in the company's properties as of December 31, 1949, was made in a memorandum by Commissioner Mylott in Case 12215, dated August 21, 1951, and approved by the commission on September 4, 1951. For the details supporting this determination and the order adopted on the same day, reference is made to this memorandum. The result was to transfer $3,093,376.65 from Depreciation Reserve to Unearned Surplus, representing amounts in those reserves in excess of the accrued depreciation as found by the commission as of December 31, 1949. This transfer represented only a portion of the amount ($10,577,954.51) which had been added to the Depreciation Reserves at the time of the consolidation resulting in the present Long Island Lighting Company before determining the net equity used as a basis for the stated value of the common stock.

There is nothing in the case of the Long Island Lighting Company which would indicate that any different rule should be applied than that stated by the commission and quoted above in connection with the Niagara Hudson Power Corporation.

It is certainly not the intention of the commission to continuously adjust depreciation reserves by transfers to or from Surplus, either earned or unearned, but is rather its policy that differences, either plus or minus, between the reserves and the accrued depreciation based on theoretical reserve requirement studies made from time to time, should be compensated for by modifying future depreciation accruals in a manner consistent with sound judgment and full realization of the fact that reserve requirement studies are necessarily based on opinion, since they involve predictions of the future.

[2] The second matter presented by the company with reference to amending Clause 2 of the order adopted September 4, 1951, in Case 12215 was commented on in a memorandum adopted by the commission May 6, 1953, in Case 16178, in which case the company was given approval to amend its articles of incorporation so as to change its common stock from no-par value to a par value of $10 per share and, at the same time, was authorized to transfer $8,533,344.23, representing the excess of the previous stated value over the new par value of the common capital stock, from Account 200, Common Capital Stock, to Account 203, Premiums and Assessments on Capital Stock. The memorandum stated (page 9) as follows:

"In connection with this, there must also be considered the present 'Unearned Surplus' balance, and whether or not the proposed change would in any way make more difficult the accomplishment of the objective stated in the commission order of ultimately transferring the remainder of this account to 'the common capital stock account' (see p. 6 *supra*). Strictly speaking such a transfer would not be permissible if the stock were changed to par value stock, since under the uniform system of accounts the 'Common Capital Stock' account would record the par value of outstanding capital stock. However, transfer to the capital stock accounts could be made if the suggestion of Mr. Booth be followed. Transfer from 'Unearned Surplus' could be made to Account 203—Premiums and Assessments on Capital Stock, provided the necessary exception and authority be granted by this commission and provided that such actions in other respects be permissible and not contrary to the expressed or implied requirements of the statutes."

No reasons, either statutory or as a matter of policy, have been found against the transfer of this amount to Account 203—Premiums and Assessments on Capital Stock, excepting the fact that legally the company could pay the amount as dividends on its common stock. The same is true, however, if it is retained in Unearned Surplus, except as it might be prevented by specific order of this commission. It is not possible to transfer it to the Capital Stock account except by the issuance of a stock dividend or by a change in the par value of the capital stock, which would require a

change in the certificate of incorporation. The commission does not have authority to order either of these.

The requested amendment to the order adopted September 4, 1951, in Case 12215 should be made.

WISCONSIN PUBLIC SERVICE COMMISSION

Re City of Oshkosh

2-U-4144
April 1, 1954

INVESTIGATION *of maintenance of street laterals by municipal water utility; establishment of rules placing burden of cost on utility ordered.*

Service, § 290 — Street laterals — Municipal water plant.

1. The commission does not object to a rule of a municipal water plant requiring customers to place original street laterals, in view of the statutory provision that the cost of water laterals shall be assessed to the abutting or benefited lots, although this should not be interpreted as endorsement of the procedure, p. 152.

Service, § 291 — Repair and maintenance — Street lateral.

2. The repair and maintenance of street laterals connecting water mains with the service box at the curb should be borne by the utility, p. 152.

Service, § 290 — Ownership of street laterals.

3. A street lateral, being the service pipe between the water main and the curb, should be owned by the utility, p. 152.

Service, § 291 — Street laterals — Maintenance and replacement — Municipal plant.

4. A municipal water utility should be required to maintain street laterals, connecting the water main and the curb, and replace laterals as they become unserviceable, although under a statutory provision the cost of laterals is assessed to abutting or benefited lots, p. 152.

Accounting, § 52 — Municipal plant — Replacement of street laterals.

5. The cost of replacing street laterals, imposed upon a municipal water utility which is not required to place original laterals, should be added to the cost of plant as shown on the utility's books, p. 152.

By the COMMISSION: Rules of the Oshkosh water department governing water laterals filed on September 30, 1930, have been the subject of correspondence and conference between representatives of the utility and the commission staff on several occasions. The most recent consideration of the matter started on December 22, 1952, when the commission received a complaint relative to charges made pursuant to such rules. The rules on laterals

place the expense of laying lateral pipes from the main to the point of use on the owner of real estate served and also provide that such pipes shall be maintained and kept in repair at the expense of the owner of the real estate.

The utility was unwilling to change the rules referred to above, and the commission on its own motion directed an investigation of the matter of maintenance of water laterals at Oshkosh.

Pursuant to due notice hearing was held January 19, 1954, at Oshkosh before examiner Helmar A. Lewis.

APPEARANCES: Water department of the city of Oshkosh, by Robert R. Thompson, President, Albert E. Hintz, Manager, and Ray C. Dempsey, Attorney, Oshkosh; Thomas E. Tietz, Oshkosh, as his interests may appear; O. P. Deuel, rates and research department, of the commission staff.

[1–5] The question under consideration is whether the rules of the Oshkosh water department should be revised so that maintenance and replacement of lateral pipes from the main in the street up to and including the curb shut-off and appurtenances thereto would be by the utility. The term "street lateral" as used herein refers to the service pipe between the water main and the curb and usually includes the main tap, corporation stop, pipe between the corporation stop and the curb stop, the curb stop, and service box at the curb. The existing rules of the Oshkosh water department require the customer to repair and, when necessary, replace the street lateral.

The general practice of water utilities is to maintain and replace street laterals at utility expense. The practice is based on the duty of the utility to provide all facilities in the street, which includes the street service pipe or lateral. Wisconsin Statutes (§ 62.19) includes a provision relating to the laying of water mains and laterals which form a part of a municipally owned plant. In general, the section provides that the cost of water laterals shall be assessed to the abutting or benefited lots. For that reason the commission does not object to the part of the respondent's rule which requires that the customer must place the original lateral. The above should not be interpreted as endorsement of the procedure because the preferred method would be for the utility to install the lateral and require the customer to pay the actual cost or an amount equal to the average cost of street laterals if it desired to recover the investment by means of customer contributions.

The assessment statute gives no authority to the municipality to assess property for repair or replacement of a lateral previously installed either at utility or customer expense.

The public service commission has many times stated that repair and maintenance of street laterals should be borne by the utility. The commission is also of the opinion that the street lateral should be owned by the utility; and that where the cost is assessed or otherwise collected from the property owner, the cost of the lateral should be included with the utility-owned plant and the amount paid by the property owner should be entered on the utility's books as a customer contribution.

The Oshkosh water utility now owns no laterals. The utility will in

the future be required to maintain laterals and replace laterals as they become unserviceable. The cost of replacing laterals should be added to the cost of plant as shown on the utility's books. Eventually all laterals to present customers will be owned by the utility.

Findings of Fact

The commission finds:

1. That the Oshkosh water department is a water public utility owned by the city of Oshkosh.

2. That the respondent has on file with the public service commission rules and regulations which include §§ 11 and 15 relative to laterals. Sections 11 and 15 of the rules of the Oshkosh water department are set forth below:

"Section 11. The expense of laying service pipes from the main to the curb and of connecting such service pipes with the main shall be charged to and is made a lien upon the real estate to be served by such service pipes and all such service pipes shall be maintained and kept in repair under the supervision of the water department at the expense of such property. No water shall be supplied until such expense has been paid. If the said expense shall not be paid within thirty days after the completion thereof, the same shall be levied and collected as a special tax upon the real estate so to be served.

"Section 15. The service pipe from the main must be maintained and kept in repair at the expense of the property owner. If the consumer fails to repair leaky or broken water pipe from the water main to the meter within such time as may appear reasonable, the superintendent of outside construction of the water utility after notification in writing has been served on the consumer, the water will be shut off and will not be turned on again until the repairs have been completed and an inspection by the superintendent of said water utility made and the cost thereof paid."

3. The policy of the Oshkosh water department as set forth in the above-quoted rules was established by the predecessor of the present municipal water utility and has been continued by the municipal water utility at Oshkosh.

4. The general rule relative to street laterals is that it is the duty of the water utility to lay service laterals without charge to the customer in the absence of any legislation relieving it from that duty. The statutes make possible a requirement that property owners must pay for water laterals but give no authority to the municipality to assess property for repair or replacement of a lateral previously installed.

5. The estimated annual cost to the respondent, if maintenance and replacement of street laterals were assumed by the utility, would be $7,970; and it is probable that the annual cost would increase.

6. The cost of maintenance and replacement of street laterals should be considered with operating costs used for rate-making purposes. The cost of maintenance of service pipes should be an operating expense, and the investment in laterals replaced should become a part of the utility's property and plant.

7. The practice of the Oshkosh water department when a leak is discovered in a street lateral is to notify the property owner. With the notification

there is a suggestion that arrangements be made by the property owner to have the leak repaired on or before a specified date. Street laterals vary in length; and, therefore, the expense of replacement of laterals varies considerably among customers. The practice which requires the customer to repair or replace the lateral when a leak is discovered can result in delay which increases loss of water.

8. The existing rules and practices of the Oshkosh water department relative to maintenance and replacement of street laterals is unjust, unresaonable, and unjustly discriminatory and should be revised.

Conclusions of Law

The commission concludes:

1. That the city of Oshkosh is a water public utility as defined in § 196.01, Statutes.

2. That the commission has authority under § 196.37(2), Statutes, to investigate the rules and practices of the Oshkosh water department and to order such changes in its rules and practices as may be found necessary to fix reasonable regulations, acts, and practices to be followed in the future.

3. That the cost of maintaining street service laterals and replacement of such laterals used as a part of the waterworks of the Oshkosh water department should be assumed by the water department and rules of the respondent should be changed to relieve the customers or property owners of such direct expense.

4. That an order should be entered directing that the rules of the Oshkosh water department, known as §§ 11 and 15 of the operating rules as set forth above, should be discontinued and rules ordered herein adopted in place thereof.

INDIANA PUBLIC SERVICE COMMISSION

Re Mt. Summit Water Company

No. 24908
April 29, 1954

APPLICATION *by water company for authority to increase rates; approved.*

Rates, § 143 — Increase to meet costs — Water company.

1. A water company should be authorized to increase its rates where the present rates are not sufficient to cover operating expenses and produce a minimum fair return on the minimum fair value of the property used and useful for the public convenience, p. 155.

Discrimination, § 42 — Metered service — Water company.

2. A water company should be directed to put all its customers on metered service, since to supply a portion of the customers on an unmetered basis results in unjust discrimination, p. 155.

APPEARANCE: James R. Stanley, Scotten & Hinshaw, Attorneys at Law, New Castle, for the petitioner.

By the COMMISSION, Tennis, Commissioner:

On December 18, 1953, Mt. Summit Water Company, Henry county, Indiana, filed its petition with the Public Service Commission of Indiana, hereinafter sometimes called "the commission," requesting an increase in its water rates to be charged to its patrons.

Thereafter, pursuant to notice as required by law, hearing was had in said matter at 10 A.M., Tuesday, January 19, 1954, at which time this matter was continued at the request of the petitioner. Thereafter, pursuant to notice as required by law, further hearing was had in said matter at 11 A.M., Monday, April 12, 1954.

Mr. Otis Bradway, owner of the Mt. Summit Water Company, Mr. Emanuel Wetter, accountant on the staff of the commission, and Mr. W. F. Gardner, engineer on the staff of the commission, gave testimony at said hearing.

Petitioner introduced the following exhibits which were admitted in evidence:

Petitioner's Exhibit No.

1. Proof of publication of notice of filing of petition.
2. The original petition in the matter.
3. Report of accounting department of commission.
4. Report of engineering department of commission.
5. Proposed rules and regulations.

[1, 2] The evidence shows and the commission finds:

1. That the allegations of petitioner's petition are true.

2. That the rates and charges now authorized and in effect are not suffi-

cient to earn petitioner's operating expenses and a minimum fair return upon the minimum fair value of petitioner's water utility property used and useful for the convenience of the public.

3. That a portion of petitioner's patrons are supplied water on an unmetered basis, which usually results in unjust discrimination and therefore, petitioner should be directed to put all of its water customers on metered service within twelve months from the date of approval of this order.

4. That petitioner should be required to keep its books and records in compliance with the commission's accounting system as embodied in the annual reports which petitioner makes and files with the commission.

5. That the proposed rates and charges would appear to be sufficient, just, reasonable, and, therefore, legal, and should be approved, together with such rules and regulations applicable to said new rates herein approved, all as set out in Exhibits "A" and "B" attached to [omitted herein], and made a part of, the petition herein, and it will be so ordered in the public interest.

It is therefore *ordered* by the Public Service Commission of Indiana, that the said rates and charges, rules, and regulations as are set out in Exhibits "A" and "B", attached to [omitted herein], and made a part of, the petition herein, be, and the same are hereby, approved and shall become effective for the first billing period for water service rendered following the date of approval of this order, but in no case shall said rates and charges be applied or collected retroactively.

It is *further ordered* that petitioner shall file the aforesaid rates, charges, rules, and regulations in tariff form, in compliance with the commission's tariff rules, within twenty days from the date of this order and at the time the said tariff is accepted for filing by the public utility tariff department of the Public Service Commission of Indiana, all rates, charges, rules, and regulations, in conflict therewith, shall be concurrently canceled and held for naught.

It is *further ordered* that petitioner shall keep its books and records in compliance with the commission's system of accounting applicable to municipal utilities, as are embodied in and prescribed by the commission's accounting forms for making annual reports to the commission.

It is *further ordered* that petitioner shall complete the installation of meters by and through which to serve all of its water patrons, within twelve months from the date of this order.

It is *further ordered* that petitioner shall within twenty days from the date of this order, through the secretary of the commission, pay total costs incurred herein, in the amount of $169.10, itemized as follows, to wit:

Accounting	$100.85
Engineering	58.49
Legal Notice of Hearing	9.76
Total	$169.10

WYOMING PUBLIC SERVICE COMMISSION

Wayne W. Call et al.

v.

Town of Afton

Docket No. 9245
March 18, 1954

PETITION *by property owner for order requiring town to cease and desist from evading duty to supply water service; town's demurrer sustained.*

Procedure, § 36 — Res judicata — Water controversy.

1. A judgment of the district court reversing a commission order, which directed a municipality to furnish water to a property owner outside its corporate limits, is res judicata and precludes a subsequent grantee from bringing a similar action, p. 159.

Service, § 48 — Commission jurisdiction — Legal rights — Water contract.

2. The commission has no jurisdiction to determine the legal rights and duties arising from an alleged oral promise of a town to supply water service to a property owner residing outside the corporate limits, p. 160.

APPEARANCES: Teno Roncalio, Attorney at Law, Cheyenne, appearing for complainants; George F. Guy, Attorney at Law, of the law firm of Guy & Phelan, and Ellen Crowley, Attorney at Law, appearing for defendant, town of Afton.

By the COMMISSION: Pursuant to assignment, the above-entitled matter came on for hearing before the commission at 2 o'clock P.M., December 11, 1953, upon the demurrer of defendant, town of Afton, to the formal complaint filed herein by the above-named complainants on November 19, 1954. Whereupon, the commission heard oral arguments of counsel with respect to said demurrer and took the same under advisement. The commission now having duly examined and considered the allegations of said complaint, the grounds upon which the demurrer thereto is predicated, and the citation of authorties submitted by counsel for the respective parties, at its request, is of the opinion that said demurrer should be sustained.

The complaint in this cause refers to and recites the history of a prior proceeding before the commission in its Docket No. 9150, which was initiated by two of the complainants herein, Charles S. Call and Robert W. Hastings, against the defendant herein, town of Afton, and culminated in the entry of an order by the commission in said docket on July 8, 1950, whereby it was ordered, inter alia, as follows:

"That the town of Afton, acting by and through its duly constituted municipal officials, be and it hereby is *authorized, directed,* and *ordered* to continue to furnish water utility service to its present noncorporate consumers; and that said town be and it hereby is further *authorized, directed,* and *ordered* to furnish similar water utility service to persons residing or operating business establishments or industrial plants within the following described territory outside the corporate limits of said town, to wit: 'Beginning at a point on the south line of section 30, township 32, range 118 west, 1,200 feet west of the southeast corner of said section 30, thence south 858 feet, thence west 1,056 feet, thence south 2,112 feet, thence west 4,039 feet, thence north 2,500 feet, thence west 8,184 feet, thence north 528 feet, thence east 2,970 feet, thence north 3,432 feet, thence east 528 feet, thence south 3,432 feet, thence east 3,432 feet, thence north 4,062 feet, thence east 1,531 feet, thence north 2,097 feet, thence east 594 feet, thence south 2,500 feet, thence east 4,224 feet, thence south 3,717 feet to the point of beginning,' in the same manner it is now serving noncorporate consumers, as long as such extraterritorial consumers or any other consumers similarly situated, are permitted to be supplied; and until further order of the commission."

The complaint further avers that defendant perfected an appeal from said order to the district court of Laramie county, Wyoming; that on May 17, 1951, said court entered a judgment in said appellate proceeding, modifying the commission's order entered in said docket by striking the above-quoted language therefrom; and that thereafter, said complainants instituted an appeal from said judgment to the supreme court of Wyoming. The complaint further alleges that complainants dismissed said appeal in the supreme court upon the oral promise of defendant town to annex their properties located adjacent to its corporate limits, or to furnish them with water service under contract; and that complainant herein, Wayne W. Call, received title to his homestead from complainant Charles S. Call, after the dismissal of said appeal. Finally, the complaint recites a breach of said oral agreement on the part of said town to provide complainants' premises with water for domestic use, the damage sustained by them resulting therefrom; and by the prayer thereof, complainants request the commission to enter an order herein directing the town to cease and desist from evading its lawful duty to provide them with water utility service.

Defendant's demurrer is, in effect, a motion to dismiss the complaint herein for the reasons therein stated. In testing the sufficiency of the complaint, we must assume that the averments thereof are true. Re Borden (Colo 1939) 31 PUR NS 422. By said pleading, the defendant has moved the commission to dismiss said complaint upon the ground that the only issues presented therein, which the commission has the right or jurisdiction to determine, were decided adversely to the complainants by the judgment of said district court which has now become final; that the matter is therefore res judicata as to all complainants and the commission, including complainant Wayne W. Call, because he is in

privity with complainant Charles S. Call, his grantor, i.e., complainants are now estopped thereby from relitigating said issues before the commission in this proceeding.

Briefly stated, the doctrine of res judicata is that a judgment rendered by a court of competent jurisdiction in a proceeding upon its merits, without fraud or collusion, is conclusive of the rights, questions, and facts in issue therein; and that the same is binding upon the parties thereto and their privies, in all other actions in the same or any other tribunal of concurrent jurisdiction. 30 Am Jur p. 908, § 161; 50 CJS p. 11, § 592.

The judgment of the district court of Laramie county, Wyoming, referred to in paragraph 5 of the complaint, was rendered and entered by said court pursuant to § 64–318, WCS, 1945, which provides in part: ". . . The court shall enter judgment confirming, modifying, or setting aside the order, or in its discretion, remanding the case to the commission for proceedings in conformity with the direction of the court . . ." and in accordance with Art 2, § 1, of the Constitution of Wyoming, which provides:

"The powers of the government of this state are divided into three distinct departments: the legislative, executive, and judicial, and no person or collection of persons charged with the exercise of powers properly belonging to one of these departments shall exercise any powers properly belonging to either of the others, except as in this Constitution expressly directed or permitted."

[1] As the terms of said statutory provision and said section of the Constitution clearly import, the district court, in reviewing our order in Docket No. 9150 and in entering its judgment in said appellate proceeding, acted as a judicial tribunal rather than in a legislative capacity. See Detroit & M. R. Co. v. Michigan R. Commission (1914) 235 US 402, 59 L ed 288, 35 S Ct 126. This judgment became final when complainants dismissed their appeal therefrom to the Supreme Court. Therefore, it must stand as the law in said case until some order or opinion of said latter court is issued to the contrary. This judgment holds that the above-quoted language of our order in Docket No. 9150 is "contrary to law"; that there is no legal duty on the part of defendant town to furnish water utility service to persons residing outside of its corporate limits; that we cannot require defendant town to furnish such service; and that we do not have any regulatory powers or jurisdiction over such noncorporate utility service. While we do not share the views of the learned court with respect to our delegated legislative powers to supervise and regulate water utility service furnished by a municipality to extraterritorial consumers and to fix its rates therefor (Moore v. Evansville (1952) Docket Nos. 9212, 9215, 95 PUR NS 357), nevertheless, said judgment is final and conclusive of the issues therein decided even though same may be palpably wrong in point of law. Under the law, we are required to respect and honor said judgment and give full faith and credit thereto. It is likewise binding upon complainants; and they are precluded thereby from again bringing their water grievances before the commission in this complaint proceeding. Napa Valley Electric Co. v. California R.

Commission (DC Cal) PUR1919E 471, 257 Fed 197. Malone v. Hay (CA DC 1926) 10 F2d 905. Re Barratt's Appeal (1899) 14 App DC 255; Kansas State Corp. Commission v. Wichita Gas Co. (1934) 290 US 561, 1 PUR NS 433, 78 L ed 500, 54 S Ct 321.

[2] The defendant contends by its said demurrer, and we agree, that the only new issue in this proceeding is the alleged oral agreement on the part of defendant town to provide complainants with domestic water service; and it thereby asserts that the commission has no jurisdiction to determine questions of contract law. The commission is an arm of the legislature. Our powers and jurisdiction must be found within the four corners of the Public Utilities Act which created the commission. Our primary jurisdiction is to regulate the rates and service of public utilities. In so doing, we are ofttimes termed a quasi-judicial body; however, our duties in general are legislative in character. We are mindful that the subject matter of said agreement is noncorporate utility service, but under the decision of said district court, we cannot require the town to furnish same; and by virtue thereof, we do not have jurisdiction to determine whether said agreement was made, whether it has been breached, or any mutual rights or duties springing therefrom. Neither do we have original jurisdiction to afford complainants any relief thereunder, by way of damages or specific performance. These are judicial functions which can only be exercised by the courts in this state.

We recognize that Wayne W. Call is a new party complainant in this action. The judgment of the district court affects his property as the same is included within the service area described in the above-quoted language of our order in Docket No. 9150. As indicated above, he received title to said property from complainant Charles S. Call. In our opinion, he is in privity with said original complainant. This being true, he is bound by said judgment in the same manner as if he had been a party to said original proceeding before the commission.

We therefore conclude and find:

1. That said demurrer should be sustained and that said complaint should be dismissed;

2. That complainants should be allowed fifteen days within which to file an amended complaint herein; and that defendant should be given ten days thereafter within which to plead thereto; and

3. That complainants should be allowed an exception to our ruling on said demurrer.

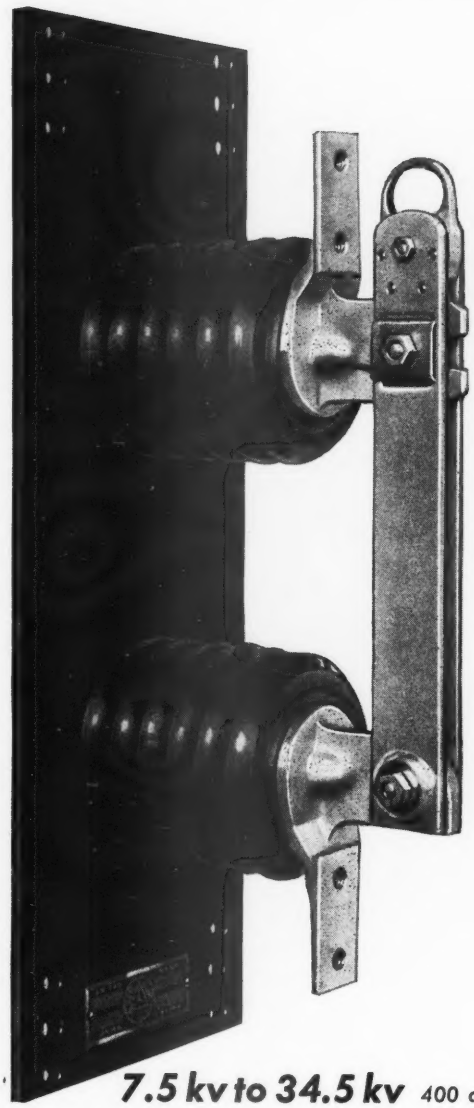
It is therefore *ordered,* as follows:

1. That said demurrer be and the same is hereby sustained; and that said complaint be and the same is hereby dismissed;

2. That complainants be and they hereby are allowed fifteen days within which to file an amended complaint in this proceeding; and that defendant be and it hereby is given ten days thereafter within which to plead thereto;

3. That complainants be and they hereby are allowed an exception to the ruling of the commission upon said demurrer; and

4. That this order shall become effective as of the date hereof.



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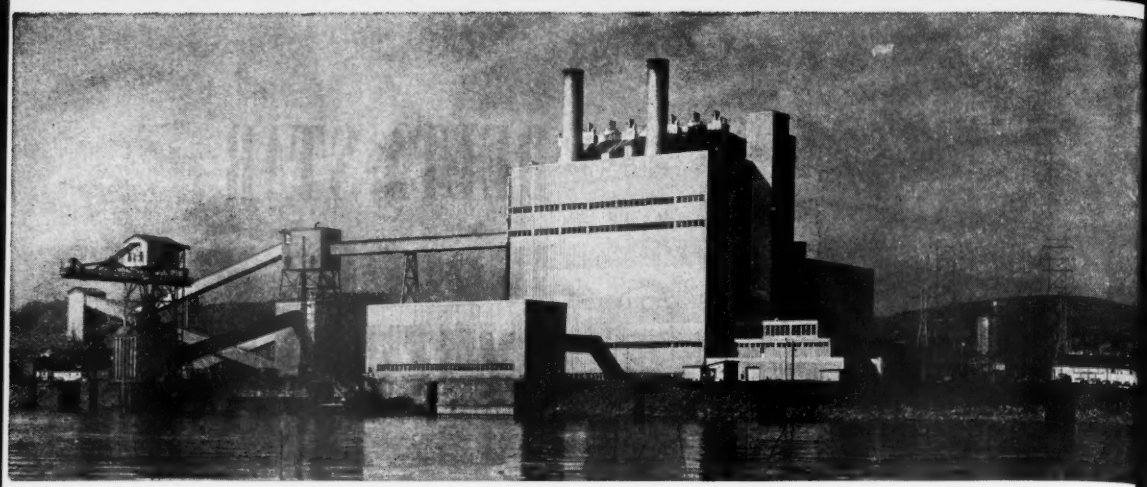

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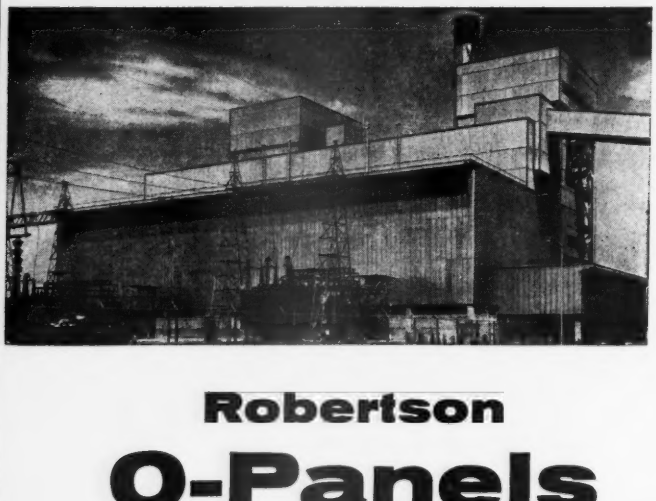

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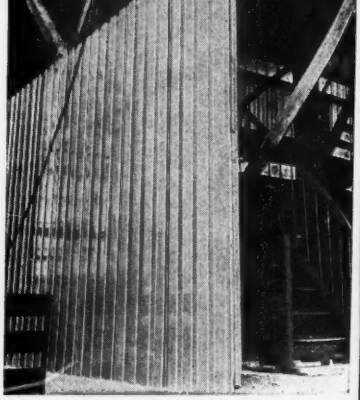

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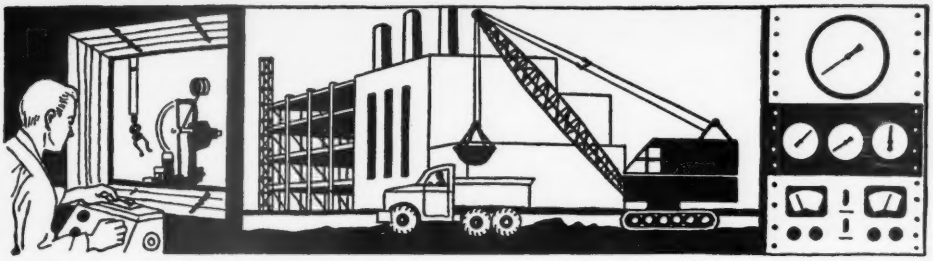

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HIS year marks the 50th anniversary of Allis-Chalmers' entry into e steam and hydraulic turbine busiss.

And, typical of many of the periods the company's 107-year history, 54 will see significant advancents in these products for the power ld.

For example, production has started the first of two 100,000-kw, 3600-m steam turbines with supercharged nerators for delivery in 1955 to a d-western utility. These will repreit the largest rating in a 3600-m generator ever built by Allisalmers.

In addition, a complete line of gle-shaft Allis-Chalmers steam turne-generator units has been carried 200,000 kw, 3600 rpm. And recent mpletion by the company of the rld's first close-coupled, cross-comund unit, rated 120,000 kw, has set practical pattern for giant future am turbine units to 500,000-kw tings.

In the hydraulic field, current Allisalmers developments include a 150,-0-hp, 2500-ft. head multi-jet imse turbine, which is being built by nadian Allis-Chalmers, Ltd., for the derground Kemano project in west-Canada. And several reversible mp-turbine units are installed or in oduction for pumped storage deopments. The first for a domestic tallation has just been placed in vice at the U. S. Bureau of clamation's Flatiron power and mping plant on the Colorado-Big ompson project.

B&W Appointments

HE following appointments have n announced at the Research and velopment Center of The Babcock & Wilcox Company in Alliance, Ohio, by L. S. Wilcoxson, vice president:

P. R. Grossman to chief research engineer with responsibility for all work undertaken by the products, materials and technical sections of research and development, both at the Center and in the field;

A. F. Boehm, manager of facilities with responsibility for office management and maintenance;

G. A. Watts to superintendent of products section;

J. F. Wachunas to superintendent of the technical services section; and

W. O. Stone, Jr., to purchasing agent of the Center.

New Truck Crane Booklet by P&H

A BOOKLET, entirely new from cover to cover, reporting fully on P&H Truck Cranes has just been printed. Devoted to the P&H Models 255-A, 355-A and 555-A, the two-color bulletin gives a broad picture story on these well-known machines. Within its 28 pages, in addition to dozens of large-size on-the-job pictures, are complete descriptions and specifications of important features such as carriers, power plants, P&H torsion bar front axles, and convertibility.

For a copy of this booklet, write Harnischfeger Corporation, Small Excavator Division, 4602 W. National avenue, Milwaukee 46, Wisconsin. Ask for Bulletin TX-143.

Neptune Expands Sales Division

WENTWORTH Smith, general sales manager of Neptune Meter Company, has been made vice president in charge of sales.

Mr. Smith's appointment is part of a reorganization of Neptune's sales division, according to D. E. Broggi, president. The sales reorganization, Mr. Broggi said, is the result of the recent acquisition of Revere Corporation of America, manufacturer of precision instruments for aviation and industry, and its subsidiaries in Wallingford, Conn., and Cox and Stevens Aircraft Corporation in Mineola.

John J. Carroll, formerly district manager in Louisville, Kentucky, has been named to succeed Mr. Smith as general sales manager.

Michael J. Kraemer Joins Commonwealth Services

MR. Michael J. Kraemer, former Public Utilities Economist for Lionel D. Edie & Co., Inc., has joined Commonwealth Services Inc., utility and industrial management and engineering consultants, it was announced recently by Granville H. Bourne, president.

Mr. Kraemer will act as a general consultant, specializing in financial studies, security analyses and budgetary projections and forecasts. He had been with the Edie organization since 1948, prior to which he was associated with Calvin Bullock as utilities analyst and Hayden, Stone & Co., as manager of the research department and analyst-buyer for the underwriting department.

His headquarters are at Commonwealth's New York office, 20 Pine street.

New Diebold File Affords Fast Accessibility of Records

DIEBOLD, Inc. recently announced the development and production of the new Super Elevator File for improving operating controls and cutting handling costs on large volume record systems common to all public utility and public carrier organizations. Each file provides ready accessibility to as

(*Continued on page* 28)

many as 300,000 records and is designed to save operator's time and effort and to conserve valuable floor space.

To operate the new Super Elevator File, a pushbutton is pressed until the desired tray comes into working position. This motorized file has an "electrical brain" which automatically brings each group of trays to the operator by the shortest route. No record is more than 3 seconds away from the operator's fingertips.

A feature of the Super Elevator File is "spread finding," which aids the operator in locating the desired record. All trays are spread before the operator in a well-lighted area where guides can be spotted in a glance—taking the operator right to the desired record.

The Super Elevator File utilizes a wide range of record sizes and weights. It handles tab cards and all popular sizes of card records—no transcription of present records to special cards is required.

The large volume of records housed in a small area by the Super Elevator File makes it particularly suitable for such public utility and carrier applications as meter location records, pole records, customer records, maintenance and pricing records, appliance service records and stub accounting systems.

Descriptive catalog on the Super Elevator File will be sent upon receipt of letterhead request. Address: Dept. G, Diebold, Inc., Canton 2, Ohio.

Jerrold Electronics Corporation Appoints General Manager

HERBERT Jacobs has been appointed general manager of Jerrold Electronics Corporation, Philadelphia, manufacturer of master antenna systems, it was announced by Milton J. Shapp, president.

Previously in the sales department, Mr. Jacobs now will coördinate all departments in the Philadelphia plant and the seven affiliate companies throughout the country.

Holan Adds New Live Boom, Heavy Duty Derrick to Line

THE Holan Corporation, 4100 West 150th street, Cleveland, Ohio has completed a new "live boom, heavy duty derrick" of 12,000 pound capacity—designed to meet the utility industry's demands for a versatile piece of equipment that can erect 70-foot poles with ease, remove poles from the toughest ground, and load heavy equipment onto the body space.

The new Holan Series 3700 Model "HL" derrick, made in three sizes, adds tons of capacity to exceed all heavy duty derricks of the past, according to the manufacturer. A difference of 1,000 pounds integral stiff leg and maximum capacity distinguishes the "HL" 22, the "HL" 24 and the "HL" 26 "Series 3700 Derrick." Maximum capacity reaches 12,000, 11,000 and 10,000 pounds respectively, and integral stiff leg capacity reaches 16,000, 15,000 and 14,000 pounds respectively. Body loading and unloading capacity of 5,000 pounds remains the same in each of sizes.

Further information may be obtained from the manufacturer.

C. Fred Westin Elected President of P.U.A.A.

C. FRED Westin was elected president of the Public Utility Advertising Association recently at its convention in Boston. Mr. Westin is assistant director of advertising for Public Service Electric and Gas Company, Newark, N. J.

Mr. Westin has served as editor of the P.U.A.A. Bulletin, was chairman of the association's advertising exchange service, and chairman of the association's Better Copy Contest. He has also served on the board of directors of the Advertising Federation of America; is a member of the advertising committee of American Gas Association and is coordinator of advertising promotion in programs of the Edison Electric Institute.

Yarway Issues New Water Gage Catalog

A COMPLETELY new 20-page catalog on Yarway boiler water columns and gages has been issued by the Yarnall-Waring Company, Mermaid Lane, Philadelphia 18, Pa.

Recently 12 major improvements have been made in Yarway flat-glass high-pressure water gages, and all are described in this new catalog WG-1814. It describes the round-glass gages for pressures up to 400 psi and the flat-glass gages featuring separated-design, floating assembly and inserts and Type "M" illuminators for pressures up to 2500 psi.

Copies of this new catalog may be obtained from any Yarnall-Waring Co. branch office, or by writing Yarnall-Waring, Mermaid Lane, Philadelphia 18, Pa.

New Construction By Gas Industry To Cost $3.9 Billion i Next Four Years

DURING the four years, 1954-19 total new construction expenditu by the gas utility and pipeline indu try will aggregate $3.9 billion, t American Gas Association repor This compares with actual expen tures of about $5.08 billion on expansion program of the industry the 1950-1953 period.

Expenditures of the industry 1953 for new facilities aggrega $1.35 billion, the second highest to in gas industry history. Last y was the fourth consecutive year which new construction expenditu exceeded one billion dollars.

Total expenditures for new c struction and expansion of pres facilities for 1954 are estimated to about $1.2 billion, with expenditu of $1.15 billion for 1955. Indus estimates for 1956 and 1957 placed at about three-quarters o billion each year.

These estimates may prove c servative, since many companies t to under-estimate construction pr ects for the more remote ye Although in the postwar years, ratio between available supply and mand for natural gas has gradu lessened, there are many factors i cating further growth of demand gas. More large pipeline projects be needed to supply industrial population growth. Though constr tion expenditures may decline. reduction from current levels may more moderate and gradual than dicated in the present estimates.

About 90 per cent of the estima construction expenditures for next four years, or a total of ab $3.6 billion, will be devoted to exp sion of the nation's natural gas s tems. About $1.71 billion will be sp on natural gas transmission lines utilities distributing natural gas spend $1.33 billion for expanded tribution facilities. Natural gas c struction expenditures in 1953 tota $1.25 billion and it is anticipated about $1.09 billion will go for natu gas construction in 1954.

For the whole gas utility and pi line industry, transmission expen tures will amount to $1.72 billion fr 1954 through 1957. About $1.6 lion will be spent on all types of tribution and $114 million will spent in expanding underground st

(*Continued on page* 30)

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Exclusive multiple selection and simultaneous operation of remote apparatus at one or several stations is optionally possible without additional equipment for selecting and operating the combinations.

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age facilities in the next four years. The distribution expenditures for the 1954-1957 period are greater than in the comparable period from 1950-53, when about $1.4 billion went into expanded distribution facilities.

West Penn Power Places in Service New $19,000,000 Unit

THE largest single generating unit in any of the West Penn Power Company generating stations—capable of producing 135,000 kilowatts — was placed in service June 30th as an addition to the company's Springdale power station.

The unit, which cost $19,000,000, is the eighth at Springdale. Construction started in January, 1952.

The additional generating capacity supplied by the new unit substantially increases West Penn's reserve for area expansion or emergencies.

Dedication of the unit, constructed by Sanderson and Porter, engineers and constructors of New York, will be held in October.

Cleveland Introduces New Model 240 Trencher For Pipelines and Heavy Construction Work

A NEW heavy-duty trenching machine for pipelines and similar heavy construction jobs, the Cleveland Model 240, has been introduced by The Cleveland Trencher Company, pioneers in the development of modern trenching equipment. The Model 240 is a full-crawler-mounted, wheel-type trencher which digs up to 36 inches wide and down to 6 feet 3 inches deep.

The Model 240 incorporates many new design and construction features in addition to all the job-proved features found in other Cleveland Models. According to the announcement, its low ground bearing pressure of 6.3 lbs. per sq. in. is outstandingly effective because the 240 is balanced perfectly at the center of its non-packing crawlers which are 100% anti-friction bearing equipped. This enables the 240 to work effectively in the wettest rights-of-way and overcome the toughest hills.

The Cleveland 240's digging wheel employs a front upper truck as well as a rear upper truck. This additional truck (3" diameter), mounted on self-aligning bearings, supports the digging wheel entirely independent of the driving sprockets, providing smooth, power-conserving digging action and adding life to segments, sprockets, shafts, etc.

Another feature of the new model is a new crawler "kick-out" clutch. It permits stopping the crawlers without halting the digging wheel's operation — gets more production in tough digging.

Complete information on the Cleveland 240 trencher can be obtained from The Cleveland Trencher Company, 20100 St. Clair Ave., Cleveland 17, Ohio.

Int. Harvester Catalog Covers Complete Line

THE complete line of International Industrial Power products, 73 in all, is described in a new 48-page catalog just published by the International Harvester Company. Technical data has been streamlined, yet contains abundant descriptive material on each piece of equipment in the entire line.

First of the eight sections in the catalog describes the seven International crawler tractors, ranging in size and power from the 41,690 pound, 155 drawbar horsepower TD-24 diesel to the 7,155 pound, 32.92 drawbar horsepower T-6 gasoline-powered crawler tractor.

This is followed by descriptive information on the International 2T-75 and 2T-55 rubber-tired tractors with scrapers and the 2S-75 bottom dump wagon.

Two push-loaded and two self-loaded four-wheeled scrapers are pictured and described in the third section of the catalog while the fourth section is devoted to 22 hydraulic and cable-controlled bulldozers, bullgraders and angle bulldozers in the new International line.

Allied equipment or attachments to International crawler tractors, such as Drott Skid-Shovels and Superior sidebooms are featured in the fifth section and cable control units and International wheel tractors for industrial use are presented on the pages forming the next two sections of the catalog.

Final portion covers the 18 models of International diesel, gasoline and gas power units.

The catalog may be obtained at no cost from International Industrial Power distributors or by writing to Consumer Relations Department, International Harvester Company, 180 North Michigan Avenue, Chicago 1, Illinois.

Hagan Appointment

M. J. BOHO, vice president in charge of sales for Hagan Corp., Pittsburgh, has been named gener manager of the corporation and all its subsidiaries. These include H Laboratories, Inc., Calgon, Inc. a The Buromin Company.

Mr. Boho became assistant gener manager of sales in 1942 and vi president in charge of Hagan Co sales in 1948.

Irvington Issues New Insulatin Varnish Catalog

A NEW up-to-date insulating va nish catalog has been issued Irvington Varnish & Insulator Di sion of Minnesota Mining & Man facturing Company, Irvington, Ne Jersey.

The new catalog contains comple data on all the long-established well as newer types of varnish available. A special feature is t section entitled, "How to Use Ins lating Varnishes."

Copies may be obtained free charge from the manufacturer.

Outdoor Metering Outfit Bookl Available from Westinghous

OUTDOOR metering outfits (Ty MP) are briefly described in a n booklet from the Westinghouse El tric Corporation.

This booklet points out that Ty MP units combine both potential a current transformers in one tank, th provide economic, installation a maintenance advantages.

Available in three phase from 2.4 115 kv, and in single phase from to 161 kv, Type MP outdoor meteri outfits have bushings which can removed easily—or inspected—wit out removing the cover.

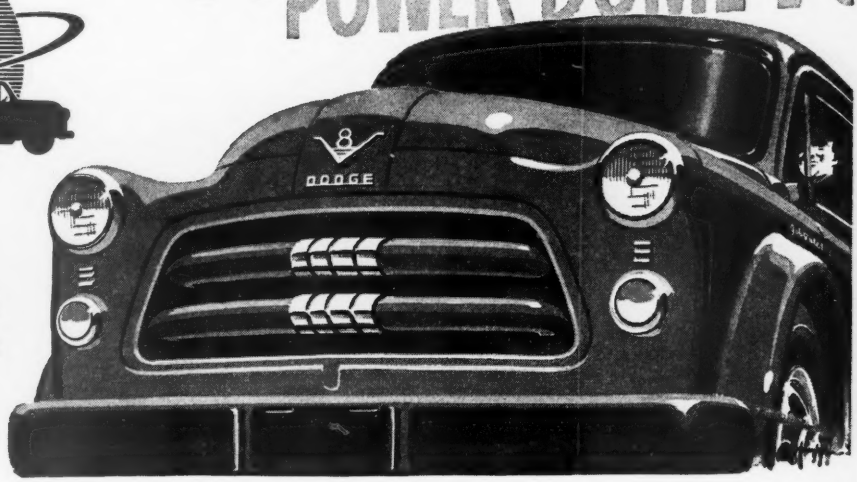
For a copy of booklet B-5916, wr Westinghouse Electric Corporati P. O. Box 2099, Pittsburgh 30, Pa.

Anderson Brass Designs New "Hook-Over" Hotline Stirrup

ANDERSON Brass Works, Inc. h added a new one-piece Hotline Stirr Clamp—Type AHLS—to its line electrical power connectors. This n design, according to the compan speeds installation and provides f positive, efficient tightening with "hot-stick." It eliminates arcing da age to conductors and its compa rugged construction promises long service as well as dependable high efficiency in service. Another impo tant feature is larger contact area.

Further data may be obtained fr the manufacturer, Anderson Bra Works, Inc., Birmingham, Alaba

POWER-DOME V-8



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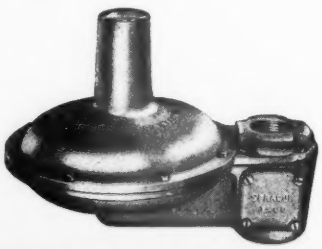

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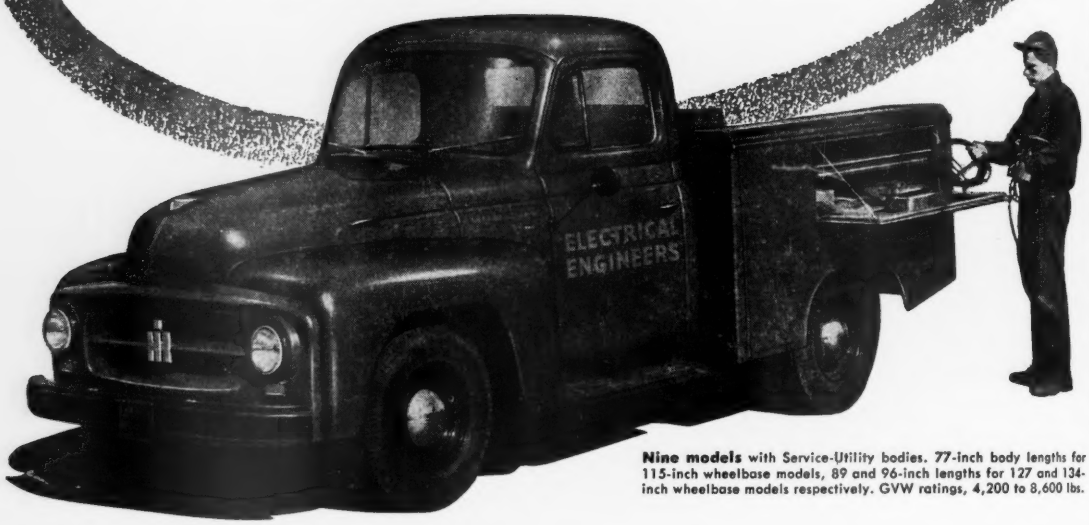

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Now look at the Service-Utility body. It is designed to save you trips and time. It has locking, all-steel compartments of various sizes that let you take all needed parts, tools, and equipment to the job on the first call. No more job-to-shop trips for forgotten items! No more wasted labor time! And it's available with pipe supports, vise bracket, and ladder rack to give you complete equipment for all kinds of work.

Let your INTERNATIONAL Dealer or Branch show you why this extra-efficient workshop truck is your all-around best bet for saving trips, time, and money. Time payments arranged, of course.

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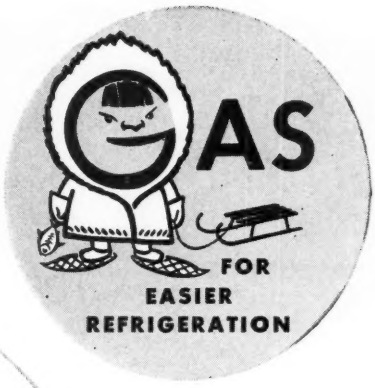

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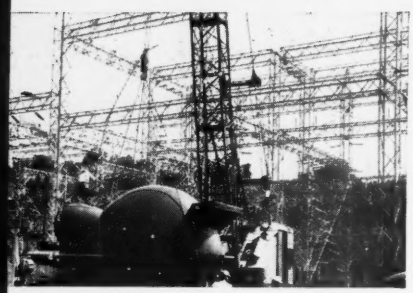
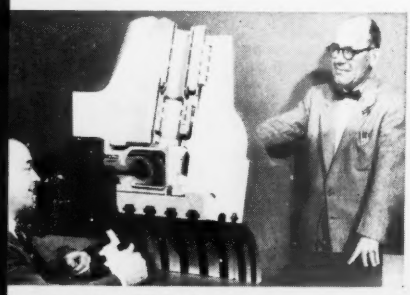
DISTINGUISHED ELECTRICAL PIONEER ING mar Coffin Award winner. Philip D. Sp rn, rig president of American Gas & Electric receiv congratulations from Philip D. Reed, left, GE Board Chairman, and Walter H. Sam is, pre dent, Edison Electric Institute. A.G. & E. and seven affiliates pioneered advances in pow generation and transmission.

Bold engineering concepts win Coffin Award for A. G. & E



330-KV TRANSMISSION line—highest voltage line in country—activated by Appalachian Electric Power Co. points to more economical distribution of power.



4500-PSIG TURBINE generating unit, shown partly in model here, is designed for Philo Station of Ohio Power Company. The unit is expected to achieve 40 percent thermal efficiency.

Increase in generating economy and first 330-kv transmission line keynote contributions

As winner of the 1953 Charles A. Coffin Award, American Gas and Electric Co. exemplifies pioneer engineering that will aid the nation's electric utility industry in keeping electricity today's greatest bargain.

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FIRST 330-KV TRANSMISSION

And second, the activation by A.G. & E. in 1953 of the nation's first 330-kv transmission line demonstrates notable progress in the continuing quest for increased economy in power transmission.

A tradition of pioneering new horizons in the field of electric power generation and transmission has long contributed to growth of the A.G. & E. system which includes Appalachian Electric Power Co., Central Ohio Light & Power Co., Indiana & Michigan Electric Co., Kentucky Power Co., Kingsport Utilities Inc., The Ohio Power Co. and Wheeling Electric Co.

The accomplishments of A G. & E. are representative of the utility industry as a whole. They point up the outstanding technological advances furthered by electric utilities to bring to America a higher standard of living coupled with constantly improving electrical service. General Electric Company, Schenectady 5 N. Y.

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